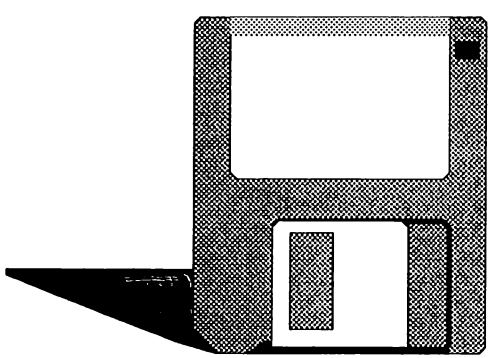
CODEHEAD Utilities



Users' Manual

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Introduction

Thank you for purchasing the CodeHead Utilities disk! If you've used your ST for any length of time, you've probably found yourself wishing there were easier ways to do things. You might want to quickly erase all the files on a disk without having to reformat it, or, in a single operation, copy more files than can appear in a GEM window.

The CodeHead Utilities disk contains a wealth of useful tools which can make using your ST easier and more enjoyable. Rather than provide one or two massive and memory intensive mega-featured applications, CodeHead Utilities contains numerous specialized programs, which fall into one of three categories: AUTO folder programs, desk accessories, and desktop runnable applications.

The utilities range from the extremely simple, such as ZERO DISK (which can erase *all* of the files on a floppy disk in one ultra-fast operation), to the complex and powerful, like MultiFile (which provides file handling functions more flexible than those provided by the GEM Desktop itself). And, while you may already have such utilities as printer spoolers, graphics slideshows, and disk copiers, we've provided our own unique versions of these types of programs on this disk. For example, most print spooling programs won't allow you to instantly flush the buffer to abort printing, nor will they buffer a screen dump, yet the CodeHead Spooler does both of these things.

Also on this disk are folders/subdirectories called SHARWARE and FREEWARE. The software in these folders is freely distributable (under the conditions specified in the READ_ME.DOC files in each folder), so you can give them to your friends who use STs. However, please note that *only* the files in the FREEWARE and SHARWARE folders may be distributed. All other files on the CodeHead Utilities disk are copyrighted, and giving away or selling copies is a violation of Federal and International Copyright laws.

For novice ST users the first part of this manual contains an explanation of the various types of programs and how to install and use them, as well as a small troubleshooting guide. More experienced users may want to go directly to the program "manuals" section in order to learn how to install and use specific utilities.

• Before You Do Anything Else:

Before continuing, you should make a backup copy of your CodeHead Utilities master disk. You can do this either by copying the entire disk, or by copying the individual files to another disk. (If you're unsure about how to copy a disk or a group of files, please refer to your ST Owner's Manual.) After making the backup copy, store the original disk in a safe place and use the copy from now on.

As soon as possible, you should also take a moment to fill out and return the registration card included in your package. In order for you to receive updates to any CodeHead Software product, or to obtain telephone support, we must have your registration card on file. Our update policy (explained in the file called README on the disk) also requires you to send back your original disk, so make sure not to misplace it.

The CodeHead Utilities disk is not copy-protected, which means that you can make as many backup copies as you need -- *but only for your own personal use.* If you respect our copyrights on the programs contained on this disk, we'll be able to continue providing you with quality software in the future.

PROGRAM TYPES

The CodeHead Utilities disk contains three types of programs: those that run from an AUTO folder; desk accessories that are loaded at bootup under the "Desk" drop-down menu and remain in memory at all times; and normal "executable" programs that can be run from the GEM Desktop or from a shell (such as CodeHead's "HotWire").

• AUTO Folder Programs

When you turn on your computer (cold boot) or press the reset button (warm boot), the ST searches the root directory of your boot disk for a folder named "AUTO," looks inside that folder for filenames with the extension ".PRG," and tries to load and run them before loading Desk Accessories (see below) and going to the GEM Desktop.

If you do not have an AUTO folder on your boot disk, you will have to create one. Make certain you name it AUTO! If you don't know how to create a new folder, consult your ST Owner's Manual).

Copy the programs you want into your AUTO folder in the order that you want them to run (if you are unsure of how to copy files, again, consult your ST's manual). Some programs must be run in a particular order in order to work properly or at all (the instructions for a specific AUTO folder program should tell you if this is the case). To make the programs run in a specific order, copy them to the AUTO folder one at a time in the order you want them to run. Don't worry if you put the files in the wrong order, because one of the programs on this disk is an AUTO folder reorganizer! (See the instructions for "AUTO Organizer" for details.)

There are two types of programs that run from an AUTO folder: programs that are unloaded from memory when they finish their job, and "terminate and stay resident" applications that install themselves in the computer's memory and remain there until a reboot. Examples

of "terminate and stay resident" programs are memory-resident print spoolers, machine language monitors, disk access accelerators, and so on. Some, like the CODE_RAM reset-proof ramdisk, will survive anything but a cold-start.

Changing to a different set of AUTO programs is a complicated procedure; you have to either set up a different boot disk for each set of AUTO programs you want to run (nearly impossible if you boot from a hard disk), or go through a maze of file copying and renaming (changing the .PRG extender on the selected AUTO program filenames to .PRX will stop them from being loaded and run). An easier way is to use an AUTO folder program that changes these filename extensions for you (one of these, the shareware program "Desk Manager" is provided in the SHARWARE folder on this disk).

NOTE: Not all programs can be successfully run from the AUTO folder! Programs that use GEM (windows, icons, the menu bar, mouse pointer, and so on) will crash if run from AUTO. This is because the programs in the AUTO folder are run before the operating system enables GEM and the GEM Desktop.

• Desk Accessories

A desk accessory is a program much like the programs you run from the GEM Desktop. The difference between a "runnable" program and a desk accessory is that the accessories load at bootup time (immediately after the programs in the AUTO folder) and remain resident in your computer's memory -- you can't run them like ordinary programs. Instead, their names appear in the drop-down menu titled "Desk," which appears at the far left of the menu bar used by the GEM Desktop and many GEM programs. (Some programs may use the Atari "Fuji" symbol instead of the word "Desk.") Accessories are "opened" by clicking on their names in the drop-down menu; you can open accessories while other GEM programs are running, giving the ST a simple multitasking capability. The CodeHead Utilities disk contains a number of very useful accessories.

When you turn on your computer, press the reset button, or switch resolutions, the ST looks in the root directory of your boot disk for files with the extension ".ACC" and tries to load them. You are limited to

six desk accessories at a time; if more than six .ACC files are in the boot disk's root directory, only the first six are loaded. Like the AUTO folder programs, changing to a different set of desk accessories can be a lot of trouble; you either set up a different boot disk for each set of accessories, or manually change the .ACC extensions to something like .ACX. AUTO folder programs to do this exist, and one is provided on this disk (see the section on the AUTO folder above). Once an accessory is loaded it cannot be removed without rebooting your computer.

(If you want to be able to load more than six desk accessories at a time, eliminate all of them during a work session and be able to load accessories when you need them without rebooting, you may wish to purchase CodeHead's "MultiDesk.")

• Stand-Alone Programs

These include any and all programs that can be run from the GEM Desktop or a shell. Most programs fall under this category. A stand-alone program will usually have a filename ending with one of these three letter extensions: .APP (same as .PRG), .PRG, .TOS, or .TTP. When such a program is run, it takes whatever memory it needs, and does its job. When you exit the program, the memory is released to the system, and the program is terminated.

NOTE: While some stand-alone programs can be successfully run from the AUTO folder (no GEM applications!), not all will function there. Conversely, many AUTO folder program will only do their job when run from that folder, and will not work as advertised if run from the Desktop or a shell.

• The Filename Says It All!

One final bit of advice for novices, changing a file's name cannot change what it does. For example, renaming a .DAT data file's extension to .PRG will *not* make it a program. A crash will occur if you try to run it. Also, renaming a program's extension to .ACC will not necessarily make it work as a desk accessory (however several specially written programs on this disk *can* be run as a stand-alone application or used as a desk accessory).

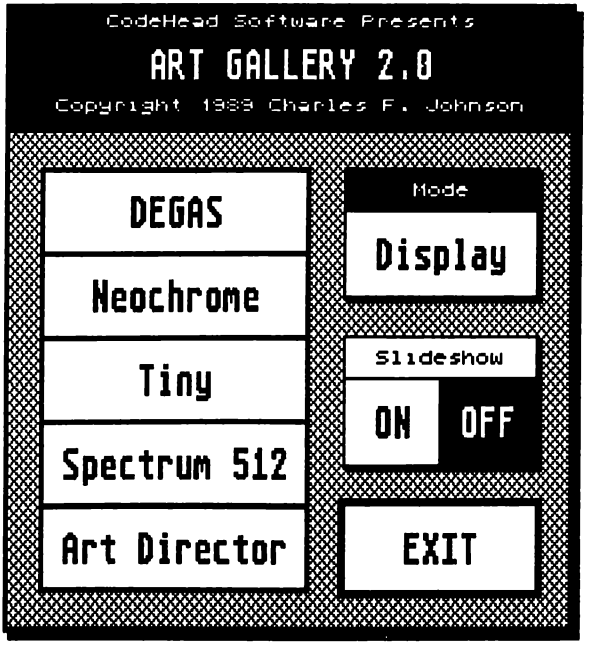
The Utilities

Following are the instructions for the utilities provided on this disk, listed in alphabetical order by name. The heading for each program contains the program's full name, the author(s), the actual filename of the program and the names of any related files, a short description of the program, and an identifier telling you what type of program it is (AUTO folder, desk accessory, stand-alone program, or combination). The screen resolution modes each program will work in are noted just below the heading.

Instructions for the programs in the FREEWARE and SHARWARE folders are included on the disk, in the folders with the programs. These text files can be viewed on screen or printed out.

Art Gallery 2.0

Author: Charles F. Johnson
Filename: ARTGALRY.PRG (or ARTGALRY.ACC)
Use: Multi-format graphics viewer/slideshow
Type: Stand-Alone or Desk Accessory
All Resolutions



Just about every paint and graphics program for the ST comes with a small stand-alone "slideshow" utility which can be used to view the images created with the program. The trouble is, most of these programs create files with different formats, so a slideshow for displaying one type of picture may not show pictures in another

format. Also, many viewers are automatic slideshows, displaying all the pictures of a specific format it can find, one after another. Thus, many times you can't select a single picture to view, but must wait for the program to cycle through all the pictures until it reaches the picture you want to view.

Art Gallery eliminates the need for many of these slideshow utilities. It is a program which can display files in five popular ST paint program formats. You can load and view one particular file, or select a slideshow mode which will display all files of a particular type in a user-selectable directory path.

Art Gallery, like MultiFile (also on this disk) and CodeHead's MultiDesk, is unusual because it can be used either as a stand-alone program (run from the Desktop or a shell), *or* it may be installed as a desk accessory! To run Art Gallery as a program, just run it like you would any GEM application.

Art Gallery can display DEGAS, DEGAS Elite compressed, NEOchrome, TINY (TNY) compressed, SPECTRUM 512 and Art Director format pictures, and supports color cycling in the DEGAS, NEO and Tiny formats, including DEGAS Elite's multi-channel cycling.

NOTE: One unique feature about Art Gallery is that it "remembers" the last used path for each type of file, so you don't have to reset the path every time you select a different file format. This "remembering" lasts only as long as Art Gallery is running. If you exit it while running it as a program, or reset your ST, the paths are "forgotten."

• Installation and operation

To install Art Gallery in your system, just copy the ARTGALRY.PRG file to the disk or drive of your choice. To install it as a desk accessory, copy the file ARTGALRY.PRG to the root directory of your boot disk and rename it to ARTGALRY.ACC, and reset your computer (or, if you own MultiDesk, just load it into MultiDesk).

To use Art Gallery either run the program or select it from your list of desk accessories; depending on how you have it installed. When Art Gallery appears you are presented with a number of options. The vertical row of buttons to the left of the Art Gallery main menu box

allows you to select the format of the picture you wish to view. To the upper right is the "MODE" box, which should show the word "Display" in most circumstances. The MODE box is *not* a control button, just a status display (more on this below).

Underneath the MODE box are the SLIDESHOW controls, consisting of two buttons. The default mode upon startup is OFF (you can determine which mode is selected by which button is highlighted), which means Art Gallery is in single-picture loading mode. If you left click on the ON button, it will become highlighted, and Art Gallery will be in slideshow mode.

The EXIT button quits Art Gallery.

• To view a single picture

Make sure the slideshow mode is OFF and then click on the button of the format you wish to view (such as DEGAS). An Item Selector will appear. Select the drive and path where the picture you want to view resides, then highlight the name of the picture you wish to view and click on the OK button (or just double-click on the picture's name). The picture will be displayed (see below if you get an error). To return to the Art Gallery menu press any key or mouse button. To view another picture, repeat the process.

If an alert box appears when you select a filename, you have either selected a file of the wrong format, or a picture that cannot be displayed in the current resolution. For instance, trying to load a DEGAS .PC1 file from high resolution will result in an alert warning "This picture's in the wrong resolution!" If you tried to load a picture that was not of the format you selected, an alert would appear stating "Incorrect format!" If either of these occur, make certain you are selecting a file of the proper format and resolution.

If you are returned to the Art Gallery main menu without seeing a picture, that means a file with the name you selected could not be found.

• To see a slideshow:

Make sure the slideshow mode is ON and then click on the button labeled with the type of pictures you wish to view.

An Item Selector will appear. Select the drive and path where the pictures you want to view reside and then click on the OK button. If you select a filename at this point it will have no effect; Art Gallery will display the files in the order they are listed on the disk's internal directory, regardless of any selected filenames. The pictures will be displayed one after another. Changing the display speed is as easy as pressing one of the ST's ten function keys. F1 is the fastest speed, F10 is the slowest. If you press the 0 key (zero), Art Gallery will flash through the pictures as quickly as possible, with no pauses.

To hold a picture on the screen for a longer period, press the space bar. The slideshow will not advance until you press the left mouse button or one of the following keys: space bar, Return, Enter, F1-F10. Pressing any of these keys allows the slideshow to continue as usual.

If Art Gallery cannot find any pictures of the selected format in the selected directory path, the main menu will reappear immediately.

To return to the Art Gallery menu from slideshow mode, press the right mouse button or one of the following keys: Escape, Help, Undo.

• Resolutions

When used on a color monitor Art Gallery can display low or medium res pictures in either resolution. Thus, a low resolution NEOchrome picture can be viewed from medium res, and a medium res DEGAS picture can be viewed from low res. High resolution pictures can only be viewed on a monochrome monitor, and when in high res Art Gallery cannot display color pictures. Consequently, high res pictures cannot be displayed on a color monitor.

• Import Mode

When used as a desk accessory, Art Gallery can also be used to load pictures into DEGAS Elite. When within DEGAS Elite you can use Art Gallery to load NEOchrome, Tiny, Art Director format pictures or DEGAS pictures (compressed or uncompressed). All formats except

Spectrum 512 apply in low resolution. Note that medium res DEGAS and Tiny pictures cannot be imported in low resolution. In medium and high resolution you can only import Tiny and DEGAS pictures of the current resolution.

When you access Art Gallery from within DEGAS Elite the MODE indicator will change to read "IMPORT," and whatever picture you choose will actually be loaded into the currently active DEGAS work screen.

IMPORT mode is useful because it allows you to load non-DEGAS pictures into DEGAS Elite, as well as DEGAS' own files. Why would you want to use Art Gallery to load DEGAS pictures into DEGAS Elite? Simply because Art Gallery loads compressed .PC* files into DEGAS Elite as much as *eight* times as fast as Elite itself!

Slideshow mode is inactive and unselectable in IMPORT mode.

NOTE: A very early and much simpler version of this program originally appeared in **ST-Log** magazine's May 1988 issue. That program was freely distributable, but the new Art Gallery program provided on this disk is *not*.

• ART GALLERY Quick Reference

IN ART GALLERY MENU BOX:

Return/Enter	**Exit**

IN SINGLE PICTURE VIEW MODE:

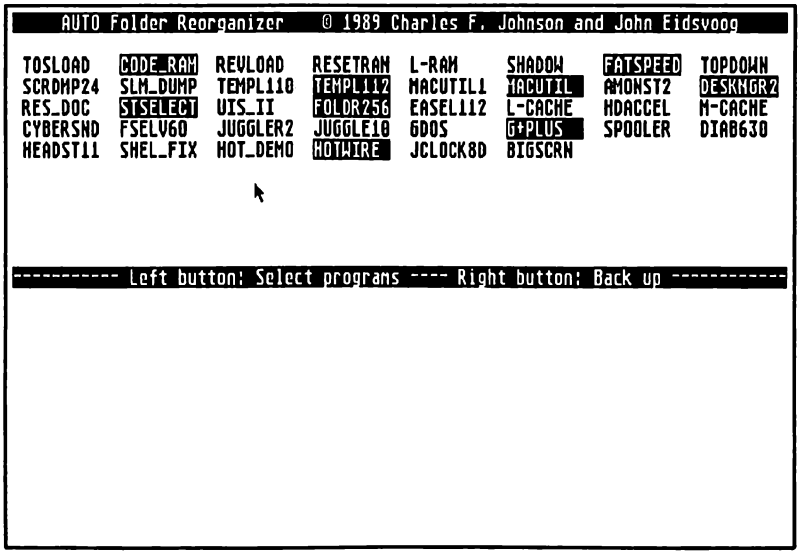
Any key	**Return to Art Gallery menu**
Left/right click	**Return to Art Gallery menu**

IN SLIDESHOW MODE:

F1-F10	**Speed of slideshow (F1 = fastest, F10 = slowest)**
Left click	**Advance to next picture**
Return	**Advance to next picture**
Spacebar	**Hold/freeze current picture**
Right click	**Return to Art Gallery menu**
Esc	**Return to Art Gallery menu**
Help	**Return to Art Gallery menu**
Undo	**Return to Art Gallery menu**

AUTO Organizer

Authors: Charles F. Johnson and John Eidsvoog
Filename: AUTO_ORG.PRG
Use: Changes the order of execution of programs in an AUTO folder
Type: Stand-alone program
Medium and High resolution


AUTO Folder Reorganizer © 1989 Charles F. Johnson and John Eidsvoog
TOSLOAD CODE_RAM REVLOAD RESETRAM L-RAM SHADOW FATSPEED TOPDOWN
SCRDMP24 SLM_DUMP TEMPL110 TEMPL112 MACUTIL1 MACUTIL AMONST2 DESKMGR2
RES_DOC STSELECT UIS_II FOLOR256 EASEL112 L-CACHE HDACCEL M-CACHE
CYBERSND FSELV60 JUGGLER2 JUGGLE10 GDOS G+PLUS SPOOLER DIAB630
HEADST11 SHEL_FIX HOT_DEMO HOTWIRE JCLOCK8D BIGSCRN
---------- Left button: Select programs ---- Right button: Back up ----------

When you power up or reset your ST the first thing the computer does (after checking for cartridges) is locate your boot disk and look for a folder called AUTO in that disk's root directory. The system will then attempt to run every program in the AUTO folder before going on to load accessories and call up the GEM Desktop. The programs in AUTO are run in the order that their names appear in the disk's internal file directory. Thus, if you copied Desk Manager to your boot disk's AUTO folder before the CodeHead RAM disk (see the

FREEWARE and SHARWARE folders), Desk Manager would be the first program run. The trouble with that is that the CodeHead RAM disk should be run *before* Desk Manager (so it can install itself or check to see if it is already installed). The ordinary way to fix this would be to erase both programs from the AUTO folder and then put new copies of them into AUTO, copying them in the order they should run. Some AUTO folders can contain dozens of programs, so such manual reorganization can be a tiresome and easily fouled-up job.

AUTO Organizer makes this job easier. It will reorganize your AUTO folder programs in a few painless steps, and it's extremely fast; it takes just a split second to perform the reorganization.

• *Before* running it

Just to be on the safe side, you should make a backup copy of the contents of your AUTO folder to another disk *before* actually going through this procedure, in the event of a power fluctuation or some other problem during program operation that could damage the contents of the AUTO folder during its reorganization.

• Running it

Just run AUTO Organizer as you would any normal program. When started the program will clear the screen, then display a title bar and an alert box asking you to specify which drive contains your AUTO folder. Your choices are drive **A** (if you boot from a floppy disk), **C** (if you have a hard disk), or **Fsel**.

If you have an AUTO folder in a different drive than **A** or **C**, selecting **Fsel** will bring up the system's Item Selector (or a custom selector, if you have one installed), and let you set the drive and path of the AUTO folder. Set the proper drive and click on **OK**, or select **Cancel** to abort the program.

The only information that AUTO Organizer uses from the Item Selector is the drive identifier. When you select a drive with a valid AUTO folder, AUTO Organizer will find the programs in that folder even if you open a different folder, even a folder containing another folder called AUTO.

If you select a path that contains no AUTO folder in the root directory, the program will alert you and then abort.

If the selected AUTO folder contains no .PRG and/or .PRX files, an alert will appear and the program will abort.

(For more information on the AUTO folder, how it works, and .PRG and .PRX filetypes, please consult the text on AUTO Folder Programs in the section about Program Types earlier in this manual.)

After properly selecting an AUTO folder the screen will be split by a bar (containing control instructions). The upper part of the screen will contain a list of all of the files with .PRG and .PRX extenders that are in the AUTO folder, listed (horizontally) in the order that they currently will run. Please note that all .PRG files are displayed in inverse text (white on black) and all .PRX files in normal text.

To select a new order for the programs to run, move the mouse pointer into the upper part of the screen and to the name of the program you want to be the first to run from AUTO. Left-click on the name to select it. You will notice that the name will immediately leap down to the lower half of the screen. Select another program from the upper part of the screen and it appears in the lower half next to the first. Continue doing this until no programs remain on the upper half of the screen. You can hold down the left button and drag the mouse to select more than one name.

If a range of program names appears that is already in the correct order, you can move them to the lower part of the screen in one operation by holding down the Shift key while left-clicking on the *last* program of the group.. This will have the effect of moving every filename from the first one appearing in the upper window to the one you just selected.

If at any time during this process you realize you have made a mistake, right-click anywhere on the screen. Every time you right-click the last item in the lower part of the screen will be returned to the list in the top half. In this way you can back up to where you made the mistake, and then continue with the selection process.

NOTE: If you right-click when there are no names listed in the lower half of the screen you will be given the option of cancelling the reorganization. If you choose to do so, the program will end without altering your AUTO folder.

When all the names are gone from the top part of the screen a message bar will appear there telling you that left-clicking will continue with the process, and right clicking will let you back up and reorganize. If everything is in order, left-click to proceed, otherwise back up and make any necessary changes.

At this point you will be presented with an alert box stating: "WARNING! About to reorganize your AUTO folder..." You have two choices at this point -- the **Do it** button will proceed, and the **Cancel** button will abort the program entirely. If you select **Do it**, the program will very quickly reorganize your AUTO folder.

WARNING! Do *not* attempt to reset your ST while a reorganization is in process! Doing so could cause you to lose your AUTO folder programs and possibly damage the directory structure of your boot disk!

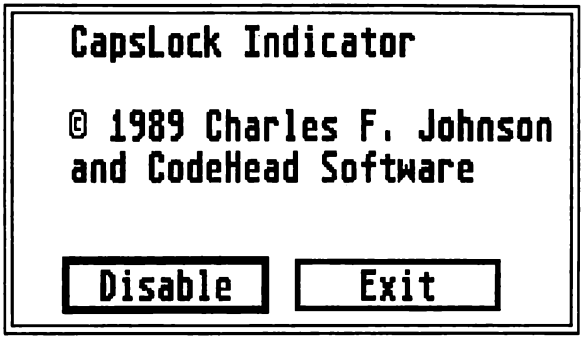
If your AUTO folder is on a floppy disk you should make certain that the disk in *not* write-protected before starting the reorganization, otherwise you will get a GEM error stating that the disk is write-protected. If this happens, remove the disk from the drive, move the write-protect tab to the "closed" position (if you are unsure of how to do this, consult your ST manual), reinsert the disk into the drive and tap the Return key to select the **Retry** option.

NOTE: AUTO Organizer will only operate on files with a .PRX or .PRG extender. It will not affect any other files or folders contained in AUTO.

Following the completion of the reorganization a final alert box will appear, informing you of the success of the operation. Clicking on the **OK** button will end the program.

CapsLock

Author: Charles F. Johnson
Filename: CAPSLOCK.ACC
Use: Shows status of ST's CapsLock key
Type: Desk Accessory
All resolutions



When engaged, the CapsLock key on a computer keyboard forces the system to interpret any letter keys you type as uppercase (capital) letters. It is much like having a Shift key frozen in the held down position, but one that would affect *only* the letters, and no other symbols on the keyboard.

On many computer keyboards you can tell if the CapsLock key is engaged; either a small light comes on, or the key locks in a semi-depressed position. The ST keyboard gives no clue as to the status of the CapsLock key, and unless you are using a program which itself reports the status of the key, the only way you can tell if CapsLock is engaged or not is to type a letter.

The CapsLock utility provided on this disk remedies this. When installed it will draw a small arrow in the upper right corner of the screen (appearing in the GEM menu bar in programs that utilize it). If

the CapsLock key is not engaged, the arrow will point down. If CapsLock is engaged, the arrow will point up.

• Installation and operation

To use CapsLock, just copy the CAPSLOCK.ACC file to the root directory of your boot disk and reset your computer (or, if you own MultiDesk, just load it into MultiDesk). CapsLock will activate itself immediately when loaded, so you should see a small outlined arrow in the upper right corner of the screen. Press the CapsLock key once and watch the arrow flip-flop, indicating the status of the key. If the arrow is pointing "down", the CapLock key is not engaged. If the arrow points "up," then CapLock is active.

If for any reason you need to disable CapsLock (see "Problems" below), all you have to do is click on its name in the accessory list and an alert box containing two buttons will appear. The first button is **Disable**, and selecting it will cause the indicator to vanish from the screen. The second button, **Exit**, allows you to leave without changing anything. If you later want to bring the CapsLock indicator back, select the accessory again. This time the buttons are **Enable** and **Exit**. Selecting Enable will return the CapsLock indicator to the screen.

• Problems

CodeHead's CapsLock accessory is free from most of the problems that plague other CapsLock indicators, so you should experience none of the ill effects that other utilities of this type cause. However, there may be times when you don't want the CapsLock indicator on the screen, where it interferes with the screen display of another program, and in such cases you should disable it.

CodeCopy

Authors: John Eidsvoog and Charles F. Johnson
Filename: CODECOPY.PRG
Use: Multiple disk copy utility
Type: Stand-alone program
All resolutions

CodeCopy allows you to format, copy, and verify disks of either single- or double-sided format (the latter only if your computer has sufficient RAM). It is primarily intended for mass duplication of disks where absolutely accurate verification is desired, such as for commercial release. Software companies and users groups alike may find CodeCopy useful for quickly and efficiently making multiple copies of disks.

CodeCopy works by reading the contents of an entire disk into memory, and then uses this RAM image to write multiple copies. Thus, you only have to read the source disk *once*, and can create copy after copy just by inserting blank disks and hitting one key!

WARNING! CodeCopy is a program for advanced users only. It is not intended or designed for use as a standard disk copier or formatting utility! CodeCopy makes perfect copies of disks, including the serial number of the source disk. As the serial numbers are used by the ST to determine if the disk in a given drive has been changed, using multiple disks with the same serial number can be dangerous! The system can mistake one disk for another with disastrous results. *Do not* use this program for any other purpose than to duplicate multiple disks for distribution!

• Startup

Before you start, be forewarned that CodeCopy gives NO warnings before beginning any operation. All commands are executed by single

keystrokes, and when you select a function it will be acted upon *immediately!* For example, if you press 'F' the program will format the disk at once, with no prompts for changing your mind or aborting.

Exercise extreme caution when using CodeCopy!

Run CODECOPY.PRG from the Desktop or a shell. When run, CodeCopy will first print a status line which informs you of how many bytes of memory are available for CodeCopy's use and how many sectors can be loaded into that space.

Immediately below the status line is a prompt which asks you which bell sound you wish to use (0 to 9). Each bell has a different tone. This is not just a cosmetic feature but provided so that if you have two or more STs in the same room, you can tell by the bell's tone which one has just finished a given operation (provided you select a different tone for each machine). If you wish, you can change the tone of the bell at almost any time while you are running the program.

NOTE: The system's bell (Control-G) remains unchanged and is used for error messages and alerts.

Pressing any key other than a number at this first prompt will cause CodeCopy to immediately abort.

You will next be asked which drive to use (A, B, or 2 [both]). The selected drive will be the unit you use for all operations. Type in A, B or 2 to select the drive(s) you want. If you select A or B, all operations will be carried out on that drive. If you select 2 (both), the system will alternate operations from one drive to the other. Pressing any key other than A, B, or 2 will result in drive A being selected.

Single-drive users should select A or B only. On a single-drive system if you select 2 (both), CodeCopy will act as if drive A was drives A and B, alternately displaying the letter of the current drive. This may be confusing to some users so if you have only one floppy drive we recommend selecting only one drive.

You can change the drive selection at almost any time in the program, so your initial selection does not have to be permanent.

The current drive is always listed whenever CodeCopy prints something to the screen. If you are unsure which drive will be used

next for a given operation, just look at the current prompt to find the drive specification. It will be displayed in one of the following formats:

Drive: A /

or

Current drive: B

The latter format only appears if you select *both* drives.

You are now ready to begin using CodeCopy.

• Using it

Once past the initial setup, the main prompt appears as below:

```
Drive: A / Sectors: 0000  Read[(], Format[)], Write[/], Verify[*],
                          Bell, Drive, Load, Save, Quit...
```

This prompt displays the current path for operations and the number of sectors that are currently in memory (0000 if no disk has been read), in addition to the keys that trigger various functions. Options are selected by pressing the first letter of the desired function (no Return is needed), or, in the case of the first four items on the menu, pressing the specified symbol on the numeric keypad. For example, pressing * to verify a disk.

The following is a breakdown of the main prompt, item by item.

Drive:

Displays the drive that will be used for the next operation.

Sectors:

Displays the number of sectors currently stored in memory (those occupied on the last disk read).

Read [(]

Pressing 'R' or '(' (on the numeric keypad) will immediately read all the data on the disk in the currently selected drive. CodeCopy will first read the boot sector, then use this information to read in the FAT (File

Allocation Tables) and disk directory. It will then read only as many sectors as are needed (starting with the first data sector) to include all files on the disk. This saves a lot of time if you are making copies of disks which are not full.

To insure that the space on the disk is most efficiently used, it is best to copy all the files onto a freshly formatted disk, which will be used as your "master" for Read purposes. By doing this, you ensure that there will be no gaps between used sectors (which can occur on disks that have had files written on and erased from). If a disk has only three or four files on it, the operations of Read, Write, and Verify will be much faster (10 to 15 seconds as opposed to 30 to 40 seconds for a full disk).

After a Read operation has been completed a checksum will be shown which is actually a sum of all the bytes read. You may wish to make a note of this number so that the next time you read the same master disk you will be assured that the data is the same. The main prompt line will now show the number of sectors that will be used for subsequent Write and Verify operations.

If there is insufficient free memory in your ST to store all the occupied sectors on a master disk, an error message will appear stating: "This disk is too big for the current memory size!"

Format [)]

When you press 'F' or ')' (on the numeric keypad), CodeCopy will immediately start formatting the disk in the currently selected drive. There is no warning! The disk will be formatted in the same format as the last disk read; either single- or double-sided, with 80 tracks (81 and 82 track disks are not supported), with either 9 or 10 sectors per track. During the formatting process CodeCopy will show the number of the track being formatted (starting with track 79 and counting down to 0).

Pressing the Escape key during a format causes the format operation to abort.

Selecting 'F' to format when data sectors are present in memory will cause CodeCopy to Format the disk in the same fashion as the disk from which the data sectors were read. When data sectors are present Format is followed automatically by Write and Verify (see 'Write' and 'Verify' below).

If no data sectors are in memory when you select the Format operation, the disk will be formatted single-sided with 80 tracks and 9 sectors per track (the standard ST single-sided format). Pressing 'Control-F' results in a disk formatted just as if no data sectors were in memory (even if there are sectors present). When the formatting finishes you will see the message "It's GOOD!!!" appear (assuming there were no errors).

NOTE: Disks formatted in this fashion do not have boot, FAT, or directory sectors, so they will produce errors when you try to read them from the Desktop. The primary use of this non-boot sector, etc., format is to provide blank disks for later Write operations.

Write [/]

Pressing 'W' or '/' (on the numeric keypad) will write all the sectors currently in memory to the disk in the selected drive, including the serial number of the source disk. The boot, FAT, and directory sectors are all written when this operation is selected. Write is always followed automatically by a Verify operation (see 'Verify' below).

Verify [*]

Press 'V' or '*' (on the numeric keypad) to verify that the sectors on the disk in the selected drive match those in memory. This is used to determine if a copy is identical to the original. In addition to using a checksum for verification, each byte of data on the disk to be verified is compared with the image in memory. If there are no errors you will hear the bell sound that was chosen and see the message "It's GOOD!!!". The checksum of the data will also be shown so that you can compare it to that of the Read operation.

If any bytes differ between the image in memory and the disk being verified, you will hear an explosion and see the message "**XXX BAD DISK!!! XXX**".

Bell

Type 'B' to choose from among 10 different pitches of bell sounds, ranging from 0 (very low) to 9 (very high). To select a bell, press the number key of your choice. The bell will sound to let you know what it sounds like.

Drive

Press 'D' to select a drive or drives. You are prompted for A, B, or 2 (both). Pressing 'A' or '0' selects drive A, pressing 'B' or '1' selects drive B. Pressing '2' uses both drives, with operations alternating between drives A and B. When 2 is selected you should be careful to take note of the currently selected drive, otherwise you might risk formatting or overwriting the wrong disk.

Load

Pressing 'L' brings up an Item Selector and allows you to load a .CCP file (see 'Save' below for an explanation of .CCP files) into RAM. Loading a .CCP file will cause any data sectors present in memory to be wiped out with those supplied by the file. Clicking on **Cancel** in the Item Selector without loading a file will abort the load and leave any data sectors in memory intact.

Save

Pressing 'S' brings up an Item Selector and allows you to save all the data sectors in memory to a single file on a disk. Such CodeCopy files are stored with a .CCP extender, and can be retrieved later using the Load option (above). Essentially, such a file is a complete disk stored as a file. This is particularly useful for hard disk users who must frequently create more copies of a master disk. They can quickly load the .CCP file containing the data sectors from their hard disk and get to work making copies.

When the Item Selector appears, edit the 'Directory:' line to reflect the pathname you wish to save the file to, type the name of the file you wish to save on the 'Selection:' line and click on **OK**. If you do not type an extender on the filename, a .CCP extension will be added automatically. To abort saving a .CCP file, click on **Cancel**.

Quit

Pressing 'Q' will exit the program *immediately*.

• Last function repeat

If you press the Space Bar, Return, or Enter, then the last action will be repeated. The most common use of CodeCopy would be to first read a master disk and then to make multiple copies. After reading the master disk, this becomes simply a matter of putting in a blank disk and hitting 'F' the first time. After that you can just hit the Space Bar, Return, or Enter to repeat the Format/Write/Verify function (make sure to put in a new destination disk before doing so!).

• Keyboard buffering

If you are using two drives (or selected 'both' with one drive) and wish to carry out another operation immediately after the completion of a task currently under way, press the key for the command you want carried out *before* the current operation is completed. CodeCopy will read this command from the keyboard buffer and carry it out as soon as it finishes its current job (if you're working on a single disk drive and need to change disks before doing the next operation *don't* use this!) CodeCopy will only pay attention to the last key pressed, eliminating problems caused by accidental key repeats. While this prevents problems it can also be something of a lifesaver. Let's say you accidentally pressed 'F' while reading a disk, but didn't want to Format the next disk. Since CodeCopy will only use the last key pressed, if you type the command for another function before CodeCopy starts formatting, it will skip the format command and do the last thing you typed (like select the bell).

• Automatic screen clear

Even with a verification program like this it is still possible to get confused and let an unformatted disk go by. For instance, you might take out the last disk, insert a new one, but forget to kit a key. A few minutes later, you look over and see no disk activity. Assuming that the disk is finished, you pull it out, and place it with your good "finished" disks, not realizing it's unformatted. Likewise, you might forget if you did actually hit a key after placing a disk in the drive. You're not sure if the disk was formatted and written to or not.

Fear not, we've foreseen this problem and headed it off. When the verify operation finishes and the "It's GOOD!!!" message appears, the program waits for your to remove the disk (or press a key). When you pull the disk out, the screen clears and the main prompt appears at the top of the screen. Now if you've forgotten to hit a key, you'll just see the prompt, not the "It's GOOD!!!" message, and that will tell you that nothing has been done with the current disk. If the "It's GOOD!!!" message appears, that means you should remove the current disk (it's finished) and insert a fresh (blank) one.

As long as you assume a disk is finished only so long as you see the "It's GOOD!!!" message, you will be assured of always ending up with valid disks.

NOTE: While the program is waiting for you to remove the disk, the drive light may show at half-brightness. This is normal and does not hurt your drive or disk. Sometimes, if you pull the disk out before the bell finishes sounding, the screen will not clear. If you are verifying a disk with the write-protect enabled, the screen will not clear.

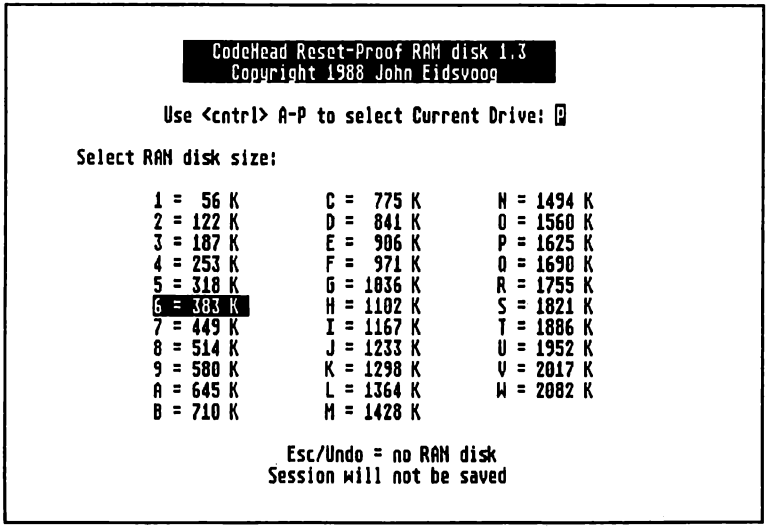
• Errors

If an error occurs during formatting, CodeCopy will ring the system bell and try again. There is usually no problem on the second try and the disk formats fine. If you hear a lot of bell sounds during formatting, you might want to question the integrity of that disk (and if you suspect it's bad, throw it away). CodeCopy will make up to three formatting attempts per track. If all three attempts fail, the system bell will ring twice in rapid succession, an error message will be displayed, and the operation will be aborted.

If a disk simply cannot be formatted or written to because it is either damaged or write-protected, an error will be generated and the operation aborted.

CodeHead Ramdisk

Author: John Eidsvoog
Filename: CODE_RAM.PRG
Use: Configurable reset-proof ramdisk
Type: AUTO folder or stand-alone program
All resolutions


CodeHead Reset-Proof RAM disk 1.3
Copyright 1988 John Eidsvoog
Use <cntrl> A-P to select Current Drive: B
Select RAM disk size:
1 = 56 K
2 = 122 K
3 = 187 K
4 = 253 K
5 = 318 K
6 = 383 K
7 = 449 K
8 = 514 K
9 = 580 K
A = 645 K
B = 710 K
C = 775 K
D = 841 K
E = 906 K
F = 971 K
G = 1036 K
H = 1102 K
I = 1167 K
J = 1233 K
K = 1298 K
L = 1364 K
M = 1428 K
N = 1494 K
O = 1560 K
P = 1625 K
Q = 1690 K
R = 1755 K
S = 1821 K
T = 1886 K
U = 1952 K
V = 2017 K
W = 2082 K
Esc/Undo = no RAM disk
Session will not be saved

A ramdisk is a program which makes your ST treat a chunk of its RAM memory as if it was a disk drive. This is particularly useful to people who have only one drive, or have only floppy drives. With one drive copying files from one disk to another can be a trying process, with the user having to swap disks one after another. Using a ramdisk can alleviate much of this tedium. If you can set up a ramdisk of sufficient size, it's possible to copy all the files from a floppy disk to the ramdisk in one operation, and then copy them *back* to another floppy in one pass. Only one disk swap instead of a dozen or more.

Single drive floppy users aren't the only ones who can benefit from a ramdisk. Even users with large capacity hard disk drives can find them useful. Because the ramdisk is actually just the computer's RAM memory, operations involving it are always much faster than with a real floppy drive mechanism or even a hard disk. Programs run and files load nearly instantly. Archiving and de-archiving files happens quickly and without using precious disk space. Temporary work files used or created by programs can be written to the ramdisk instead of a disk drive.

But remember, a ramdisk exists only as long as the computer has power. If you cold boot or turn off the computer, the ramdisk and its contents will go the way of the Dodo.

• How to use it

The CodeHead Ramdisk is unlike many public domain ramdisks in two key respects. First you can select any one of over thirty possible memory size configurations, ranging from 56K to 2082K (if your ST has enough memory). Secondly, CodeHead Ramdisk is reset-proof, meaning that the ramdisk will not be destroyed if you reset (warm-start) your computer.

Furthermore, the CodeHead Ramdisk is unlike most other reset-proof ramdisks that run from the AUTO folder because while they force the machine to reboot once after installing the ramdisk, ours doesn't.

To install a CodeHead Ramdisk you must either boot your ST with a copy of CODE_RAM.PRG in your boot drive's AUTO folder, or run it from the desktop. If you intend to use a ramdisk often you may want to go with the AUTO folder route. If you expect to use the ramdisk only on an "as needed" basis, you will probably want to run it from the Desktop. Below are instructions for each type of installation. Read the section appropriate to the installation you intend to use.

• AUTO folder installation

If you wish to install it as an AUTO program, place a copy of CODE_RAM.PRG in your boot disk's AUTO folder. CODE_RAM should be the first thing to run from the AUTO folder.

If you use CodeHead's TopDown Loader, CODE_RAM should run before TopDown, otherwise there will be a top-end memory conflict and CODE_RAM will not install), though if you are using a hard disk access accelerator, like FATSPEED (shareware), CODE_RAM should run immediately *after* that program.

To set up the programs in your AUTO folder to run in a specific order, you can use the **AUTO Organizer** program provided on this disk (see page 12).

Once you have CODE_RAM in your AUTO folder and the contents of that folder arranged to your liking, you can attempt to install a CodeHead Ramdisk. *Please read the following paragraphs **completely** before actually going through the steps described!*

For this first installation, you will want to cold-start your computer (turn it off then back on, or, if you have TOS 1.4 in your ST, hold down the Alternate, Control and right Shift keys while pressing Delete). CODE_RAM will run from your AUTO folder when you restart. *If you are booting from a floppy drive make certain the disk containing the AUTO folder and CODE_RAM is in drive A.*

When the program executes, it will display a full-screen menu of possible ramdisk sizes. When this menu appears press the Space Bar immediately. When run from the AUTO folder CODE_RAM will display its menu for about 5 seconds. If you don't respond to the menu by pressing a key or moving the mouse within those 5 seconds, the program will proceed using the default configuration (covered later). The Space Bar is a "neutral" key that has no effect on CODE_RAM other than pausing it; other keys do specific things so you should avoid using them until you know what you're doing).

Go through the above procedure and then follow the steps in the **Setup and use** section below.

• Installation from the Desktop

Run CODE_RAM.PRG as you would any normal program. An alert box identifying the program, author, and version number appears. From this box you can make one of three choices:

Continue continues with the ramdisk installation.

Exit aborts the installation.

Cold Boot allows you to cold-start your ST, which will clear memory of all accessories and any ramdisk(s) already present. You are given a second chance to change your mind before the cold boot actually occurs.

Selecting **Exit** or **Cold Boot** effectively terminates the program. Only **Continue** will take you to the actual installation.

When you select **Continue** the program will display a full-screen menu of possible ramdisk sizes.

If a CodeHead Ramdisk is already installed when you reach this step the menu will not appear and a message will be displayed telling you the size and identifying letter of the ramdisk.

Go through the above procedure and then follow the steps in the following section.

• Setup and use

On page 26 you will find a picture of the CodeHead Ramdisk menu. (Please refer to this picture for the following discussion.) At the top of the screen is a prompt telling you to hold down the Control Key and press a letter from C to P for the ramdisk's drive identifier (A and B are used by the floppy drives and inaccessible). If you are using a hard disk or other device that uses one of the 16 drive identifier letters you should choose an unused letter. For example, if you have a hard disk partitioned as drives C, D and E, you should select only letters from F-P.

At screen center is a menu of 32 available ramdisk sizes, listed in total kilobytes (K). You can select a ramdisk configuration by one of three methods: pressing the key corresponding to the size you want

(such as B for a 710K configuration); move the highlighter box using the arrow keys on your keyboard and Return to set the size; moving the mouse to move the highlighter to the desired size and left-clicking.

Once you actually select a configuration, the ramdisk will be immediately installed and the program will end by displaying a message showing the selected drive and size, e.g:

56 K ramdisk installed as drive C

To abort without installing a ramdisk you may press either the Escape or Undo keys or click the right mouse button.

Once the drive is installed it can be treated just like any other disk drive. You can copy files to and from it, Show Info on it, and so on. However, you cannot copy the contents of the ramdisk to another drive by dragging its Desktop icon atop another icon, as that only works for two identically formatted floppy disks. Nor can you format the ramdisk. But all other disk copy and delete operations will work normally, including dragging the icon for one drive onto an open window to another drive (floppy to ramdisk or vice versa) in order to copy its contents to the other device.

• Saving the configuration

At the very bottom of the main menu of the CodeHead Ramdisk you will find a small message that states "Session will not be saved". This is the default configuration. If this message appears, the next time you try to install a new ramdisk the size and drive identifier you selected last time will be forgotten. If you plan to use a ramdisk of the same size and with the same drive letter each time, you will probably want to have the program remember your settings and use them automatically.

Saving the configuration from your current session is as easy as pressing the F1 key on your ST's keyboard when the main menu is on the screen. Do this *before* selecting a ramdisk size! F1 acts as a toggle, switching between "Session will not be saved" and Session will be saved". When the latter message appears on the screen, whatever drive identifier and ramdisk size you select will be saved to the CODE_RAM.PRG program file, and will be the default setting whenever you install a new ramdisk. This does not mean you are

forced to use the new default configuration, for when the menu appears you can make another choice for a given session without affecting your saved defaults as long as "Session will not be saved" appears on the screen. Thus, you could have a default of a 383K ramdisk as drive D for most cases, but on certain occasions you could select a 580K ramdisk as drive H.

If you choose no ramdisk with the session saved setting on, the default of no ramdisk will be saved to the program.

The menu always appears initially with "Session will not be saved" and must be manually switched in order to save a configuration, so it is nearly impossible to accidentally overwrite a default setting.

Once a default has been saved, installing the ramdisk is even easier. If you're running the program from the Desktop or a shell, just press Return to use the saved default settings. That's it. If you're running CODE_RAM from an AUTO folder it's even easier. The program will display the menu for 5 seconds, and if you do not take any action, will automatically installitself without any input from you. Of course, if you don't want to wait the 5 seconds, you can always tap Return to use the default settings.

• Reset proof?

When you reset your ST (a warm boot) the system basically purges everything in memory, or just plain forgets it's there. With a normal ramdisk any kind of reset is usually enough to kill or cripple it and its contents. A reset-proof ramdisk is designed to withstand a warm start, such as changing resolutions or pressing the ST reset button. Immediately after a warm reset you may find that you cannot access the CodeHead Ramdisk. Nothing should have happened to the ramdisk itself; however, the ST "forgets" just about everything during a reset, and thus doesn't "remember" that there's a ramdisk present. In order to refresh its memory the CODE_RAM program must be re-run. This will "remind" the system that the ramdisk is present. If you are running CODE_RAM from an AUTO folder, it will automatically be re-installed after the reset. If not, you will have to run CODE_RAM.PRG manually.

NOTE: It is still possible that a system crash will corrupt the ramdisk and/or the files therein, even though things might appear to be all right at a first glance. This can't be helped simply because it's impossible to guard against a major system error or program malfunction.

• Accessing the ramdisk from the Desktop

From the moment the CodeHead Ramdisk is installed the ST knows it's there. However, while the ST is aware of it, the GEM Desktop won't be able to access it until a drive icon has been installed. You must install an icon with the same drive letter assigned to the ramdisk. This can be done using the "Install Drive" selection under the "Option" menu on the GEM Desktop. If you regularly install a ramdisk with the same drive letter you should save the desktop with the icon present. (If you don't know how to install a disk drive icon or how to save the Desktop configuration, consult your ST manual.)

• Removing the ramdisk

To remove the CodeHead Ramdisk requires a cold boot. You can do this by either turning off your ST for a few seconds (5 to 10 is recommended) or by running CODE_RAM.PRG and selecting the Cold Boot option. If you don't want another ramdisk installed when the machine reboots, just don't run CODE_RAM (if it's in an AUTO folder just use Undo, Escape, or right-click the mouse to skip installation). Cold booting the machine also lets you reinstall the ramdisk, so you can change its settings if necessary.

REMEMBER that if you cold boot your ST everything in your ramdisk will be lost! Make sure anything important has been copied to a "real" drive before cold booting!

• Online Help

If you need some information on how to use the CodeHead Ramdisk you can either consult this manual or use the on-line help feature. Pressing any key not used by the program for a specific function will result in a help screen appearing. You can exit this screen with a keypress or mouse click.

Don't worry about accidentally saving the help screen as a default configuration. If you have "Session will be saved" selected and then call up the help screen, the session save setting will be toggled off.

• Miscellaneous

This ramdisk only recognizes official Atari ROM releases up to the date of its release. If an unknown ROM version is used (future Atari releases), the ramdisk will still work fine, however, it will just reset the system and reboot after initial installation, just like all ordinary reset-proof ramdisks.

If a memory block the size of the ramdisk is not available immediately below the screen, you will have the option or cold booting or aborting.

Unfortunately, some software packages actually limit the number of devices that the program can directly access to under the GEM limit of 16 units (A-P). Some go as low as drive F! If the program allows access to the GEM Item Selector this is not a problem; however, if you have any programs that do so limit the number of drives, you should select a letter for the ramdisk within the range allowed by the programs.

• CodeHead Ramdisk quick key guide

Control/C-P	**Set drive letter**
1-9, A-W	**Install ramdisk size corresponding to letter/number**
Esc/Undo/right-click	**Quit without installing ramdisk**
Arrow keys/mouse	**Move highlighter on menu**
Return	**Install ramdisk using size highlighted on menu**
Space Bar	**Abort automatic timeout**
Help/any unused key	**Display program information**
F1	**Session save toggle**

CodeHead Print Spooler

Authors: Charles F. Johnson and John Eidsvoog
Filename: SPOOLER.PRG and SPOOLCNF.PRG
Use: Full featured, user configurable printer spooler
Type: AUTO folder or stand-alone program with stand-alone configuration utility
All resolutions

If you have a printer you know how agonizing it can be to wait for a printing job to finish so you can regain control of your computer. Normally, when you print a document, your ST is just twiddling its digital thumbs, trickling data out the printer port only as fast as the printer can take it... which is usually *very* slowly. However, in most cases the system is frozen up during a printing job, so even though it's doing almost *nothing*, you can't use it until the printer is done.

What a spooler does is reserve a block of memory and redirect the system's printer output to it. The data is then spooled out of this memory block to the printer at its speed. If the buffer is large enough the program "printing" the material can dump the entire document into the buffer at once, and be finished in a matter of seconds. Since as far as the application is concerned it has finished its printing job, control of the system is returned to you. So you can work on something else, even run a completely different program, while the spooler sits in the background and keeps the printer going.

The CodeHead Spooler is powerful, flexible *and* can be configured to your needs. It supports features that other print spoolers lack, like the ability to abort printing and clear the spooler at any time with a keystroke, and also the capability of spooling the ST's screen dump function.

• Installation

The SPOOLER.PRG file is the actual spooling utility. It can be run either from your AUTO folder or from the Desktop. All you have to do to install it in run the program (this, of course, happens automatically if run from AUTO).

• Configuring the spooler

You may not like the default size. If not, simply run the SPOOLCNF.PRG (spooler-configuration) program from the Desktop. When run the program will bring up an Item Selector, and you must locate the actual spooler program for the configuration utility. Locate and select the filename of the SPOOLER.PRG file (you may have renamed it) and click on **OK** (**Cancel** will abort).

Once the spooler utility has been located the configuration program will read its current settings and display them on the screen with a prompt allowing you to change it, as below:

Current size (K):64

New size? (**Return**=keep) >

The current configuration in the example is set to 64K (64 kilobytes). To reconfigure the spooler is as simple as typing in a new value and pressing Return. Pressing Return without entering a number keeps the current setting.

When Return is pressed the settings are written to the spooler program and the configuration program exits to the Desktop.

Don't install a spooler bigger than you need or your machine can handle! A 100K spooler is bigger than most people need. We recommend 64K as a good setting, even if you don't print very large documents (the reason is explained below).

• Using it

Once the CodeHead Spooler has been installed it is "invisible." You won't even know it's there until you start printing (and even then it's easy to forget it's there working). It will not slow down the system or otherwise interfere with normal operations. The only thing you'll miss

is a little of your ST's memory (and you probably won't even miss that unless you are running very low on free RAM).

Print as you would normally. The spooler is automatic, so it requires no extra effort on your part to get it going.

One thing to note. If the file or data you are printing is larger than the spooler's buffer, you will still have to wait until enough of the document has passed through the spooler so that remaining text/data will all fit in the buffer.

• Halting a print job

If you find you have to abort a printing job before its completion, simply hold down the *right* Shift key on your ST keyboard while pressing Enter. This will clear out any data in the spooler's buffer and end the print job almost instantaneously (your printer may have its own small internal buffer and may print a few lines even after you flush the spooler's buffer).

• Spooling a screen dump

As you probably know, pressing the Help key while holding down Alternate will cause the ST to "freeze" and dump the current image on the screen to the printer (if this doesn't work on your printer, it may not be compatible with the ST's screen-dump technique). In addition, many programs access this function in order to print out a screen (even the GEM Desktop has a "Print Screen" option). Printing the screen can take several minutes on an average printer, and ties up the machine. Every other printer spooler we know of can't buffer a screen dump, but CodeHead Spooler can. However, the spooler must be configured with at least 64K for a full screen dump to work.

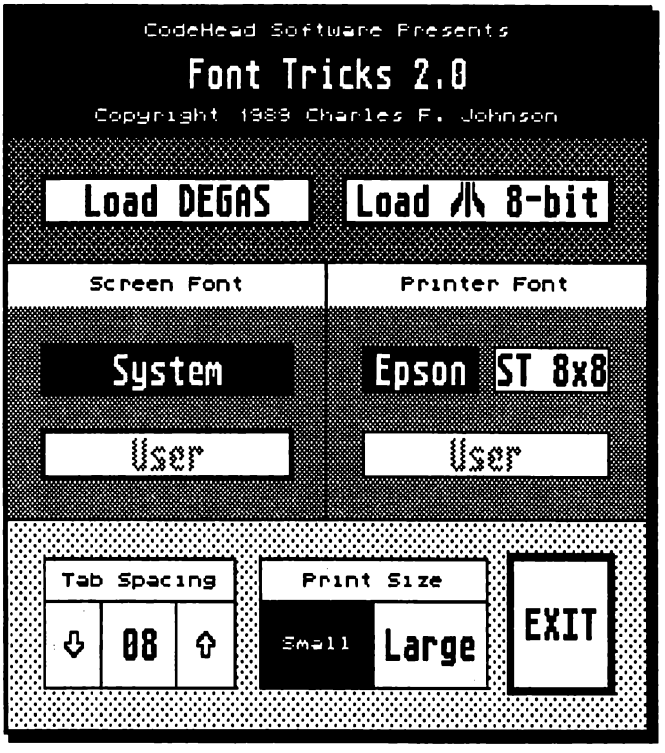
You can abort a spooled screen dump the same way as you can a text dump.

• Removing it

To remove the spooler you must reset your ST. If you have the SPOOLER.PRG program in your AUTO folder you may want to deselect it (change the extender from .PRG to .PRX) before you reboot.

Font Tricks 2.0

Author: Charles F. Johnson
Filename: FONTRIX2.ACC
Use: Replace system font with custom font
Type: Desk accessory
All resolutions



The text you see on your ST screen is always the same old system font; a rather plain typeface. Unfortunately, the ST's operating system doesn't provide any easy way for the average user to change the screen font.

Font Tricks 2.0 is an accessory that allows you to replace the system font with a font file of your choice. If you have an Epson compatible printer, you can even print out text with alternate fonts, simply by using the GEM desktop's "Print" function!

• Installation

To install Font Tricks in your system, just copy the FONTRIX2.ACC file to the root directory of your boot disk and reboot your computer (or, if you own MultiDesk, just load it into MultiDesk).

• Installing a screen font

Font Tricks works by loading a font file from disk, placing the data for this new text in your ST's memory, and forcing the computer to use these new character shapes in place of the built in ones. Fonts can be either DEGAS font files (such as those produced by the DEGAS Elite FONTEDIT program) or fonts created for the Atari 8-bit computers (such as the Atari 800XL or 130XE).

When you select Font Tricks from the Desk menu (or from MultiDesk), the menu box seen on the preceding page will appear.

To load a font, just select one of the two "Load" buttons at the top of the box, making sure to select the format (DEGAS or ATARI 8-bit) that you plan to load. A number of DEGAS format fonts are provided in the FONTRIX.FNT folder on the CodeHead Utilities disk.

For now click on **Load DEGAS**. When the Item Selector appears, open the FONTRIX.FNT folder. You will see all the files with the .FNT filename extender (no other files will be shown). For this example, select COURIER.FNT and click on **OK**. The font will be loaded.

To load an XL/XE font just click on **Load /I\ 8-bit** button. Atari 8-bit font files should have the extender .FN8, so that Font Tricks can find

them. If you have any fonts ported from the 8-bit Atari, you should rename them so that they end with this extender.

NOTE: No 8-bit fonts are provided on the disk, as Font Tricks is primarily geared towards using DEGAS font files.

The Font Tricks menu reappears after the font has loaded. At this point the screen will look no different than before, except that the name of the font now appears in the lower of the two buttons under the "Screen Font" and "Printer Font" labels. Previously the text on these buttons said "USER" and were grayed out. The font has been loaded but it has not been selected for a function yet. To install the loaded characters as the screen font just click on the **COURIER** button under "Screen Font". The first thing you should notice is that all the text of the normal font size in the Font Tricks menu box has changed to the new font. (The extremely small text on this box (also used for the drive icon labels on the Desktop) are not effected by Font Tricks as they use a different system font.)

Click on the **SYSTEM** button under "Screen Font" and the text will return to the normal ST font. Once a font has been loaded you can activate and disable it with these two buttons.

Reactivate the font you loaded and click on **Exit**. You may notice that the entire screen does not switch to the new character set immediately. This is because text on the ST is bit-mapped, not character mapped. The stuff that's on the screen doesn't change, because it's been drawn on the screen, just like a paint program would. In fact, if you have a directory window open on the Desktop and you call up Font Tricks to load a font, when you exit Font Tricks only the part of the window that was covered by the Font Tricks menu gets redrawn in the new font. The next time you do something that causes the directory windows to be updated, the new font will take over. This applies to parts of the screen other than windows. You will notice that the text on the GEM menu bar remains in the system font. However, if you do something which forces a full-screen redraw (like running a program and then quitting), the new font will take over the menu bar.

When switching to any font, including the system font, the same thing will occur. A redraw will have to be forced before the selected font will take over.

• Printer fonts

Under the "Printer Font" options are three buttons. The default is **Epson** and when it is highlighted your printer will use its normal default font. If you click on **ST 8x8**, any text sent to the printer will be printed in the standard ST 8x8 pixel font. The third option is the **User** button, which will display the name of whatever font file is loaded (if any). If you select this button, Font Tricks will force your printer to use the currently loaded font.

To switch back to your printer's normal font, just click on the **Epson** button.

NOTE: The Printer Font option will not work on all printers. It is designed to support printers that are compatible with the Epson FX80 control code and function standard. Furthermore, you may find that some programs will not print as you expected if a Font Tricks Printer Font has been selected. If this is a problem, switch the Printer Font option back to **Epson.**

In addition to the **Exit** button, at the bottom of the Font Tricks menu are a set of printer controls. They are as follows:

Tab Spacing

Click on the arrows to change the default Tab spacing. When you print a file this setting tells Font Tricks how many spaces to use whenever it encounters a Tab character. Numbers can be from 1 to 16.

Print Size

The two options here are for Small or Large text. Small text prints the current font in a condensed typeface. Large prints the text in a wide, full-size typeface. You should select whichever one is better suited for your needs.

• Default fonts

Font Tricks can automatically install a certain font when it loads (either under the Desk menu or from MultiDesk). You can also set up default fonts for each of the ST's three screen resolutions. To do this you should copy the font in question to the same directory containing FONTRIX2.ACC and rename it to either LOW.FNT, MEDIUM.FNT, or HIGH.FNT, depending on which resolution you intend to use it in. For instance, if you wanted to use a COURIER font in low res, you would copy it to the correct directory and rename it LOW.FNT. If you then renamed a Gothic font in the same directory to MEDIUM.FNT, when Font Tricks is loaded in that resolution, it would load that font. When loaded in low, it would load the LOW.FNT file.

NOTE: Only DEGAS fonts are supported for default fonts! You should not try to use 8-bit .FN8 files, because they will not work.

• A warning about DEGAS fonts

Fonts created for the DEGAS paint program use and 8x16 format, not the usual 8x8. This is double the vertical resolution of an 8-bit font. When Font Tricks loads a DEGAS font, it checks to see which resolution you're in. If you're in high resolution, the 8x16 format is used (the ST used an 8x16 font in high res). If you're in low or medium resolution, however, every other line of each character must be thrown away in order to create an 8x8 font. Properly constructed DEGAS fonts have a flag at the end of the file which indicates whether the font may be scaled to half-height or not.

If Font Tricks determines that a DEGAS font can't be scaled properly, you'll see an alert box informing you of this, and the font will not be installed. If you do manage to load a font that looks strange or unreadable, call up Font Tricks again (even if you can't read the text), and click on the button just above the highlighted button on the left side of the box. This will restore the system font, and you can try another font.

NOTE: A very early and much simpler version of this program originally appeared in **ST-Log** magazine's January 1987 issue. That program was freely distributable, but the new Font Tricks program provided on this disk is *not*.

Lens

Author: Barnaby Finch
Filename: LENS.PRG
Use: Recursive graphics manipulation
Type: Stand-alone program
All resolutions

This program may at first seem just like the function in many paint programs that allows you to clip a rectangular block of the screen and "paint" with it. That isn't so. There's one big difference between Lens and those paint functions. Paint programs like DEGAS copy the selected portion of the screen and put it into a buffer before using it to paint with. Lens, on the other hand, always looks to the screen for its block, so, if you draw over the source block, you start to feed back. The brush paints over itself, changing every time the brush passes over the area of the original block! The effect is not unlike pointing a video camera at a TV that's displaying the camera's output.

In other words, Lens is a simple recursive system. There are many examples of recursive, non-linear systems in nature and mathematics, such as fractals, weather forecasting and turbulence. One characteristic of such systems (that Lens shares) is that even the slightest change in movement can lead to entirely different states for the system as a whole.

Actually, the foregoing was just a brazen attempt to make a trivial and insignificant piece of code seem vastly important. Lens is a "computer toy"...have fun with it!

• Running Lens

Run LENS.PRG from the Desktop. The screen will clear and a description and instructions for the program (not unlike those printed here) will appear. The text is formatted so that it can be displayed in all three resolutions, so it will seem "narrow" in medium and high resolution. There are three screens of text. To step through the screens, press any key. Following the third screen the actual program begins.

After the text you are presented with an Item Selector. The filetype it is looking for is a standard DEGAS picture in the current resolution. If you have one, load it. If not, don't worry. Edit the pathname from *.PI1 (or 2 or 3) to *.* so that it will display *all* files. Now, pick any file, preferably one that is at least 32K in length, and click on **OK** in the selector (**Cancel** will end the program). The data, not matter what its form, will be treated as if it was a bit-map for the ST's screen display (if it looks like garbage, don't worry). A hand-shaped pointer appears on the screen. Point to a location towards the upper-left corner of the screen; then, holding the left mouse button down, drag the cursor until you have outlined a large rectangle, and release the mouse button.

A copy of the rectangle you defined is now "clipped" out and you can move it around with the mouse. *Do not press either mouse button at this time!* As you move the mouse, you are "drawing" with the rectangle you clipped. Nothing really strange about that *unless* you move the brush over the spot where you cut it out from originally. Move it over that location and then wiggle the mouse slightly. Notice how the brush changes? This is the recursive graphics technique in action. The brush is modifying itself!

Try slowly moving the brush back and forth or in circular patterns over the spot where it was cut originally. It's a good way to create weird, wonderful, sliding and shifting patterns that are quite interesting.

It's possible that after a few minutes of this you'll find that your brush may have turned to one solid color (particularly if you are working in high-resolution), or that the patterns are getting less interesting. To start over, just Left-click the mouse. The screen is returned to its initial state and you can start again, defining a block and drawing. If you Right-click before defining another block, the Item

Selector will reappear and you can either pick another file to work with or quit by clicking on **Cancel**.

NOTE: In medium resolution it's easy for the screen colors to get so jumbled that you can't really see the Item Selector's text. If so, click on the **Cancel** button (the lower of the two). The program will end and you can run it again.

As you're drawing, if you decide that you want to save your recursive masterpiece for posterity, right-click the mouse. The Item Selector appears, allowing you to type in a filename and save the current screen as a DEGAS format picture in the current resolution.

CAUTION! Exercise extreme care with the right mouse button. If you don't pay attention you may end up thinking that you are loading a file rather than saving one, and could end up accidentally overwriting important data with the current screen!

• Lens command summary

FILE MODE (No block defined)

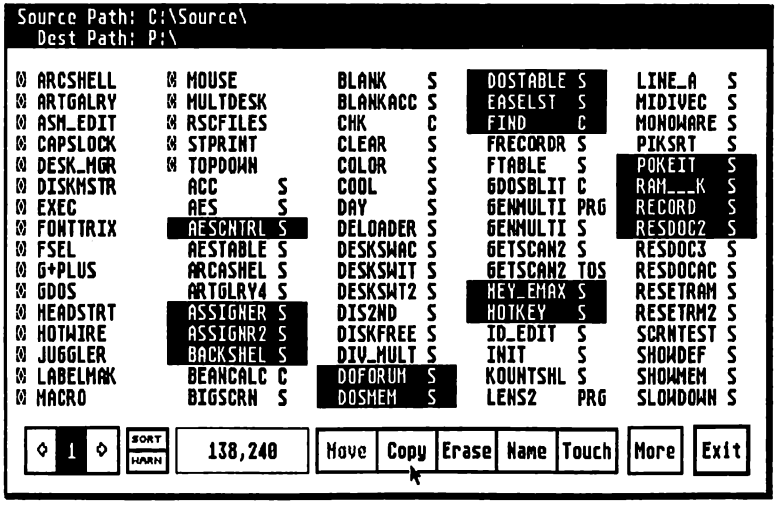
Right-click	**Calls Item Selector so another file can be loaded or the program can be quit (using Cancel).**
Left-click	**Held down, starts and draws new "rubberbox" defining block/brush. When you release the button, the block is clipped and you are in Draw Mode.**
Help key	**Brings up built-in documentation.**

DRAW MODE: (Block defined)

Right-click	**Calls Item Selector so current screen can be saved as a DEGAS picture.**
Left-click	**Restores picture and returns you to File Mode.**

MultiFile

Author: Charles F. Johnson
Filename: MULTFILE.PRG (or MULTFILE.ACC)
Use: Multi-featured file handling utility
Type: Stand-alone program or desk accessory
Medium and high resolution



While the GEM Desktop is a fairly good environment in which to handle files, many times its features seem to be lacking in important areas. Furthermore, unlike a real desktop, which doesn't vanish when you work on a project, when you run a program, the GEM Desktop disappears, and with it go most of its functions.

MultiFile addresses both of these limitations. It provides many features for file handling not found in GEM itself, and, if used as an

accessory, allows you to continue to use these features from any program that provides access to the Desk menu.

Furthermore, MultiFile allows you to save all your current settings, so that the next time you use it, all your usual settings will be the default. This includes display options, paths, disk format options, and so forth.

• Installation and operation

To install MultiFile in your system, just copy the MULTFILE.PRG file to the disk or drive of your choice. To install it as a desk accessory, copy the file MULTFILE.PRG to the root directory of your boot disk and rename it to MULTFILE.ACC, and reset your computer (or, if you own MultiDesk, just load it into MultiDesk).

To use MultiFile either run the program or select it from your list of desk accessories; depending on how you have it installed.

When MultiFile appears the screen will be covered by a large box. (See the preceding page.) Since the most common use of MultiFile is copying, moving, renaming, and deleting files, the program defaults into this mode. Additional functions are available by selecting the **More** button at the bottom of the box. The box itself is divided into three zones, top to bottom. They are:

PATHS

The source and destination paths for most operations are set and displayed on this line.

SOURCE PATH DIRECTORY

The main bulk of the box is an area that displays the names of the files in the currently selected directory path. Up to 80 files can be displayed at once, and if more than this number exists in the directory you can flip between multiple "pages" of filenames, without deselecting any items you have selected for a given operation.

CONTROLS

Across the bottom of the box are the program's controls. These include buttons for adjusting display settings as well as controls for file

manipulation. Just to the left of center is a counter which displays the amount of disk space used by the files currently selected in the source path directory.

A typical session of using MultiFile might go as follows. You want to copy all the desk accessories from the CodeHead Utilities disk to a folder on another drive. To do so you would set the source and destination paths in the PATHS area, select (highlight) the files in question in the SOURCE PATH DIRECTORY area, and finally copy the file by clicking on the appropriate button in the CONTROLS area.

To simplify the task of instructing you on the use of all of MultiFile's functions, we will be presenting the options section by section, going through each distinct "zone" one at a time.

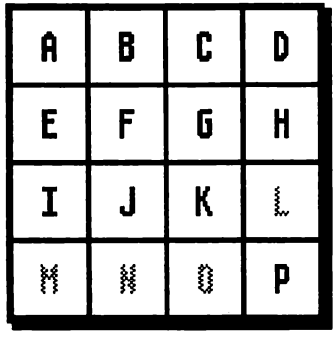
• PATHS

This is where you set the source and destination paths for a file operation. The source path is the drive and folder from which you will copy, move, or delete files, and in which are the files you may want to rename or "touch." The destination path is the drive and folder to which you intend to copy or move files.

When you call up MultiFile for the very first time both the source and destination paths will be set to drive A:\. Chances are these will not be the paths you want to work with. There are several ways in which to select a path, as described below.

• Setting the drive path

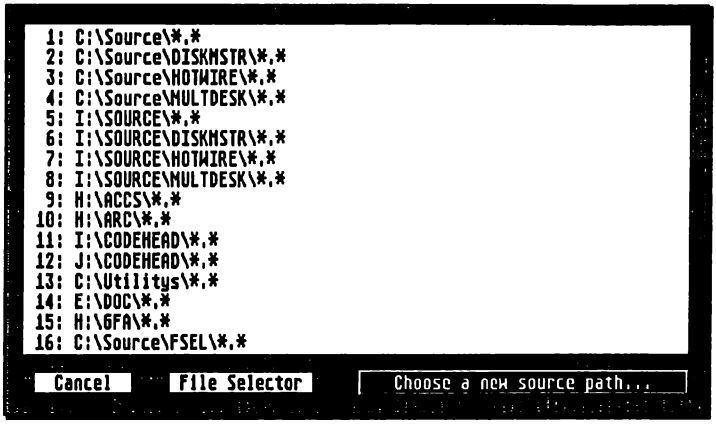
The simplest way is just to click on the words 'Source Path:' or 'Dest Path:' in the Path area. Clicking on either of these will cause a small box containing 16 buttons to appear, each labeled with a letter for drives A through P. The letters for the valid drives on your system will appear in black, all others will be grayed out. To select a different drive, just click on the letter of your choice. Clicking on a grayed-out box will have no effect.



When you click on a valid drive's button, the drive select box disappears, and the drive change is reflected in the line you edited. If you hit the Return key, the drive select box will disappear without changing anything.

To set a specific folder on a drive, see the further options below.

- **The 'Choose Path' menu**



Another method for setting/selecting a path is to use the Choose Path menu. You can access this in one of three ways; double-clicking, shift-clicking, or right-clicking on 'Source Path:' or 'Dest Path:' in the Path area. This will result in a large menu appearing over the main MultiFile box. The menu's white box contains 16 numbered lines. Below this are **Cancel** and **File Selector** buttons, and a message telling you to either 'Choose a new source path...' or 'Choose a new destination path...'.

Each of the 16 lines in the white box can contain a drive path. To add one to the list just click on one of the numbers. An Item Selector will appear, and you can set the path to your liking. Set the path and folder (if any) that you want, then click on the Selector's **OK** button (or click on **Cancel** if you decide not to do this). You are returned to the

MultiFile box, and the new path will be displayed on the line of the number you selected.

You can do this for all 16 lines if you like, setting commonly used paths. To actually use one of these paths just click anywhere on the actual pathname. You will exit the Choose Path menu and be returned to the MultiFile menu, with the new path installed as the source or destination (depending on which you chose initially).

There are only 16 paths defined, any of which can be used as a source or destination path. There are *not* 16 paths for the source and 16 for the destination.

NOTE: The entire list of paths is saved to MultiFile if you use the 'Save Config' option. For further information on saving the configuration see 'More' in the CONTROLS section below.

To set a path *without* placing it into one of the 16 slots, click on the **File Selector** button. The GEM Item Selector appears, allowing you to set any path you wish. When you click on the Selector's **OK** button you are returned to the MultiFile main box, with your new path installed as either the source or destination, without affecting any of the 16 paths in the Choose Path menu. Clicking on **Cancel** from the Selector just returns you to the Choose Path menu.

• Into and Out of Folders

The SOURCE PATH DIRECTORY displays *only* the files and folders appearing in the current Source Path. Folders are always listed first, and are identified by the standard GEM folder symbol (a diamond in a box) just to the left of the folder name. All other names appearing are those of programs and data files.

To open a folder in the source path without having to use the 'Choose path' box (see above), you can simply click on the name of the folder, and it will open. The 'Source Path:' line at the top will change to include the newly opened folder, and the SOURCE PATH DIRECTORY will now display all files and folders in the selected folder. If a folder exists within the current folder, you can enter it just as easily.

To back out of a folder, you merely have to click on the 'Source Path:' line in the PATHS area. If you click on the name of the previous folder

to the one you are currently in, the source path will be backed out to that folder. Likewise, if you clicked on the drive letter, the path would jump back to that disk's root directory. An example is in order here. Let's say the current source path looks something like this:

Source Path: A:\AUTO\DESKMGR\SYSFILES

The currently displayed source path is the folder SYSFILES, which is nested within two other folders. If you wanted to back out to any other folder, you would just click on that folder's name in the pathname (such as clicking on DESKMGR to back up to that folder). To return to the root directory, you'd just click on A:. This allows you to quickly back up to whatever level you want without having to tediously back out one folder at a time.

• Flip-flopping the Source and Destination paths

The above method of moving into and out of folders is very simple and quick. However, since only the source path is displayed, the same cannot be done to the destination path. Seemingly, the only way to change the depth of the folder on the destination path is to use the 'Choose path' box. However, there *is* an easier way.

To alter the folder depth of the destination path in the same manner as the source path is simple. All you have to do is temporarily make it the source path! To do this, just hold down the Control key while clicking on either 'Source Path:' or 'Dest Path:'. The two paths will be flip-flopped, with the source path becoming the destination and vice-versa. Once the paths have been flipped, you can alter the source path to reflect what you want your destination path to be, and when you are finished, Control-click again to return them to their original order.

This feature is the recommended way for quickly altering source and destination paths. It can also be used whenever the current source and destination paths need to be exchanged (such as for deleting files from the destination path before copying more items there).

• THE SOURCE PATH DIRECTORY

The main bulk of the MultiFile box is taken up by the current source path directory. This area contains 5 rows of 16 slots each. Each slot can hold the name of a file or folder. Up to 80 names can appear in the box at any one time; if the directory contains more than 80 file and folder names, the first 80 will be displayed and the others will be viewable by flipping to alternate "pages" containing those names (see 'Page-Flip' in the CONTROLS section below).

The main function of the Source Path Directory is to allow you to select files for operations using the various options in the CONTROLS area at the bottom of the MultiFile menu. When a file or group of files has been selected, you can click on one of the CONTROLS options to carry out the specified action on some or all of the selected items.

As the CONTROLS are in a separate area, there are only five operations that can be carried out in this box: selecting and deselecting files, renaming files, showing information about a file or folder, changing a file's read/write status, and erasing a folder. Of these, the latter three are all carried out when you show info on a file or folder, and thus are not distinct functions.

• Selecting and Deselecting Files

To pick a file or files for a particular operation, you merely need to click on the names of the files. They will become highlighted, so you can tell that they are selected. If you decide you don't want to act upon a file you've selected, you can deselect it just as easily, by clicking on it again. This method is fine for one or two files, but clicking individually to select dozens of files would be monotonous. You cannot drag a rubberbox around a group of filenames, as you can in the GEM Desktop windows, however, there are several options for quickly selecting or deselecting a number of files. They are as follows:

DRAWING

If you click on an unhighlighted filename, hold down the mouse button and move the mouse pointer, you can "draw" the pointer over filenames, selecting them without having to click on them individually. This will not affect files already highlighted. However, if you start

"drawing" by clicking over a highlighted filename, you will be deselecting files, and drawing over any highlighted files will unhighlight them. This likewise does not affect files that are not already highlighted.

CONTROL-CLICK

Holding down the Control key while you click on any unhighlighted filename selects *every* file in the current directory. Every program and data file (but no folders) are highlighted. To deselect all highlighted files just Control-click on any highlighted filename.

NOTE: Selecting a folder name in any of these fashions will *not* select it for an operation, but merely open the folder, changing the current source path. (See 'Into and Out of Folders' above.) Folders cannot be selected for operations using the CONTROLS.

SHIFT-CLICK

Holding down either Shift key while clicking on any unhighlighted filename causes it and all other files with the same extension to be highlighted. For instance, if you Shift-clicked on ARTGAL20.ACC, every other file in the current directory with the filename extension .ACC would be selected. Likewise, Shift-clicking on a highlighted file would deselect all highlighted files with the same extension. This is useful for selecting all files of a given type, such as text files, desk accessories, programs, resource files, etc.

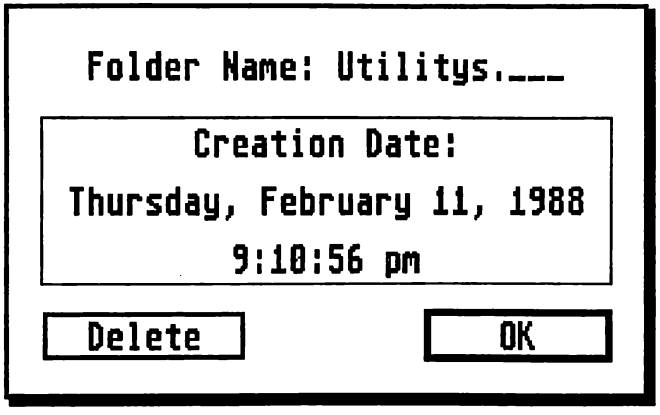
ALTERNATE-CLICK

Holding down the Alternate key while clicking on any unhighlighted filename causes it and all other files with main filenames beginning with the same first six characters (if any) to be highlighted. For instance, if you Alternate-clicked on ARTGAL20.ACC, every other file in the current directory with a filename beginning with ARTGAL would be selected, regardless of the last two characters in the filename or the three letter extension. Thus files with the names ARTGALRY.ACC, ARTGALRY.PRG,ARTGAL20.TXT, and so forth would also be selected. Likewise, Alternate-clicking on a highlighted file would deselect all highlighted files with names beginning with the same six characters as the selected file. This is useful for selecting related files, which often have similar names, like CAD3D2.PRG, CAD3D2.RSC,

CAD3D2_A.DOC and so on. The reason for not comparing all eight characters is that often the last two characters may vary.

• File/Folder Information

To get information on a file or folder just right-click or double-click on its name in the menu (this is the only time you can click on a folder name in this area without altering the source path).



FOLDERS

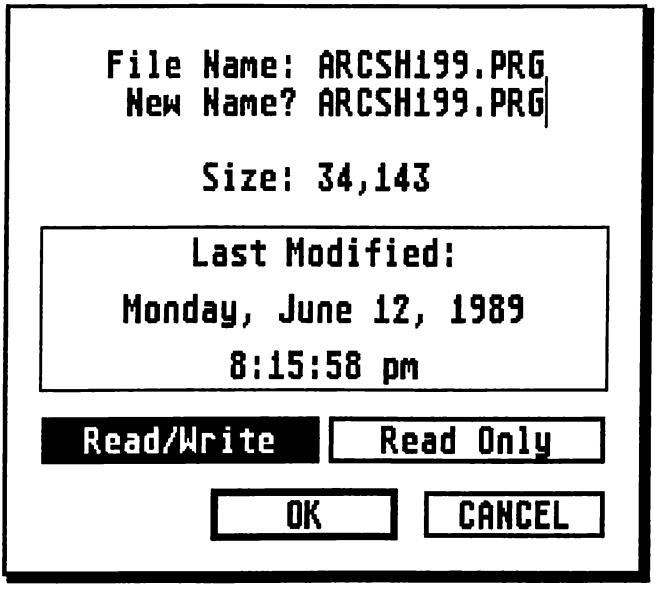
When you get information about a folder, a dialog box appears which tells you the name of the folder, and the date and time it was created (if you don't set your system clock this may not be accurate). Two buttons appear at the bottom of the box, **Delete** and **OK**.

OK exits the folder info box and returns you to the MultiFile main box. **Delete** allows you to erase the folder. When you select this button you will be asked if you really want to do this. Selecting **Yes** will cause MultiFile to attempt to delete the folder. Selecting **No** will abort the operation.

WARNING! The alert which asks you to confirm the folder deletion will appear *only* if the 'Erase Folders' item is checked in the 'WARN' options. While this is the default, if you change it MultiFile will attempt to delete the folder without giving you a second chance to change you

mind! (see 'WARNings' in the CONTROLS section below for more information.)

Please note that deleting a folder will only work if the folder is empty, and contains no other files or folders. If you attempt to delete a folder that is not empty, you will receive an error message telling you that the folder must be empty before it can be deleted.



FILES

When you get information about a file, a dialog box appears which tells you the name of the file, its size, the date and time it was created, and its Read/Write status. You have several options here. If you are just looking, clicking on the **OK** or **Cancel** buttons at the bottom of the box will exit the info dialog. Beyond this you have two editing options you can undertake: renaming the file and/or changing its Read/Write status.

Directly under the 'File Name:' label in the box is a line labeled 'New Name?' This line comes up with the current file name displayed, and, if the file is not Read Only, a cursor appears at the end of the line,

allowing you to edit the current name. If you change the name, you must click the **OK** button to save the change. Clicking on **Cancel** ignores the name change.

Just above the **OK** and **Cancel** buttons are two large buttons, one marked **Read/Write** the other **Read Only**. One will be highlighted, indicating the status of the file. When you alter one of these options, the change is made instantly, without your having to **OK** the action. If the **Read/Write** button is selected, the file can be renamed, deleted, overwritten, and 'touched' (see CONTROLS). If the **Read Only** button is selected, the file is in a sense "locked" and cannot be modified or deleted. You will notice that when **Read Only** is highlighted that you cannot change the name of the file.

• CONTROLS

Across the bottom of the MultiFile box are a series of controls and a counter which tallies up the total number of bytes used by the files. The controls here, while they may act upon the selected files, will (with the exception of 'Erase' and 'Move') not affect the selected filenames in the Source Path Directory. For instance, if you selected all .ACC files in the source directory and then copied them to another drive, the files would not be deselected. In this manner you could copy them again, rename them, or whatever, *without* having to reselect them all again, as you would from the Desktop.

These items in the CONTROLS area are, from left to right:

PAGE-FLIP CONTROL

This item appears only if the number of files and folders in the current source directory exceeds 80 items. It is designed to allow you to flip "pages" so that you can find any file in the directory. When MultiFile sees that a directory contains more than 80 items this box will appear, with a number indicating the current "page" of the directory, flanked by two buttons containing arrows. The right-facing arrow advances to the next page (if any more follow) and the left-facing arrow backs up. Just click on the appropriate arrow to go forward or back through the pages.

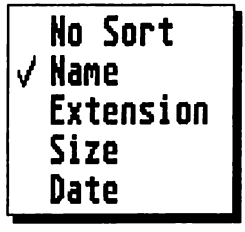
Do not worry about using this control when you have files selected. The highlighted items will not be deselected if you flip pages. MultiFile treats the directory as if all files were being displayed at once, and Page-Flip, unlike the Desktop window's scroll bars and arrows, has no effect on which files are selected and which are not.

SORT and WARN

To the left of the Bytes Used Counter are two small buttons. The top is 'SORT' and the bottom 'WARN'. Clicking on either button brings up a menu which allows you to adjust various settings. The options under 'SORT' allow you to determine by which criteria MultiFile displays filenames in the Source Path Directory. The options under 'WARN' allow you to turn on and off the warnings which can appear when various operations are attempted.

REMINDER: Changing the SORT or WARN settings will *not* affect any items you have selected in the Source Path Directory, so don't be afraid to use them in the middle of a file-selection or other operation.

If you click on SORT a small box containing five options appears. A checkmark appears to the left of the current selection. To change the selection simply click on the option of your choice. The SORT settings are changed and the box disappears. To abort without changing the selection, press the Return key on your ST keyboard.



The SORT choices are:

No Sort

Does no sorting. Displays the items in the current directory (folder first, then files) in the order they are stored in the disk's internal directory. This is useful for determining in which order various files are saved (for instance, what order the programs in an AUTO folder will run).

Name

Sorts the items alphabetically by name (folders then files). If two items have the same name, but a different extender, the extender is used to determine which is listed first.

Extension

Sorts items alphabetically by their extenders. Items with common extenders are grouped together in alphabetical order by name.

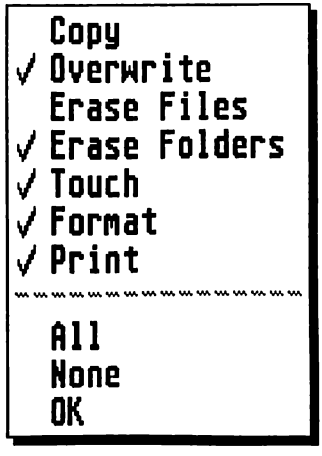
Size

Sorts items by their size in bytes, from largest to smallest. Folders are sorted alphabetically, with no regard for the amount of data stored within them. Items with a common filesize (like NEOchrome pictures, which are always the same size) are grouped together in alphabetical order by name.

Date

Sorts items chronologically, with the most recently created or revised (resaved) items appearing first, and the oldest last. (Since the time and date listed for the file are determined by the ST's real-time clock, this option is only useful if you routinely set the clock to the correct time and date each time you boot up or have a battery backed up clock installed [Mega ST's have a built in battery backed up clock].)

If you click on WARN a small box containing seven options appears. A checkmark appears to the left of the active warnings. To toggle a warning on or off, simply click on the option of your choice. When you've completed your selections, click on the OK option at the bottom of the box or press the Return key on your ST keyboard.



If selected, the WARN choices warn you before performing the following actions; if not selected, you are not warned:

Copy	Warning before copying files.
Overwrite	Warning before overwriting existing files.
Erase Files	Warning before files are deleted.
Erase Folders	Warning before attempting to delete folders.
Touch	Warning before touching files.
Format	Warning before disk format begins.
Print	Warning before printing the current source directory.

A line of dashes separates the WARN choices from a few additional options. These are:

All	Selects *all* warnings.
None	Selects *no* warnings.
OK	Accepts warning settings and exits box.

• The Bytes Used Counter

This is a gauge used to determine how many bytes the currently selected files occupy. This is useful to know because it can be used to determine if a destination disk or directory has sufficient room to contain all the selected items if they are copied or moved there.

The gauge does not just add up the total number of bytes the files occupy, but it rounds the total up to the next kilobyte (K) boundary. MultiFile does this because the smallest unit of storage on an ST disk is two physical disk sectors of 512 bytes each, or 1,024 bytes (one K). Thus, no matter how small a file is, it can't occupy less than 1024 bytes on a disk. Without this 'rounding' feature, it is possible to think that a disk has enough room to contain all the files when it does not.

The purpose of this gauge is not only to tell you how much data you are copying or moving, but also to show you how much you are erasing.

When you copy, move, or erase a number of items, the counter starts off showing the size of all the items, then subtracts the number of bytes used by each item as it is acted upon. For instance, every time a file is copied the amount of bytes it takes is subtracted from the total. This continues until the operation is either aborted or completed. When completed the counter will read "0". If Move or Erase was selected it will remain at "0" because the selected items are either relocated and/or deleted, so they no longer appear. If a Copy operation was used the items will remain selected, the "0" will momentarily vanish, and the full number of bytes used will reappear.

Name and Touch operations have no effect on the counter.

• The File Manipulation Buttons

To the right of the counter is a cluster of five buttons, which, when clicked upon, act on all the highlighted files appearing in the Source Path Directory. You should be aware that all five procedures can be aborted in progress if you hold down the Alternate key until the operation ceases (there is a variation on this for 'Name', so consult its instructions below).

NOTE: Aborting one of these operations does *not* undo whatever action has already been taken. If you hold down Alternate while files are being erased, the process will abort as soon as the program finishes its current delete operation. It will halt where it is, but that will not undo actions taken previously, so take care!

The buttons have the following functions:

Move

Moves the selected files from the source path to the destination. If the source and destination paths are on the same drive the move is carried out by merely altering the directory path for the file, with no actual physical 'movement'. If the source and destination paths are on different drives, the selected files are first copied to the destination and then erased from the source directory.

If a file with an identical name to one you are moving exists in the destination directory a "NAME CONFLICT DURING MOVE" dialog appears. You can **Cancel** to skip moving the file, click on **OK** to

overwrite the file with the identical name, or edit the filename on the "New Filename?" line to avoid the conflict and then click on **OK**.

If you attempt to Move a file set to Read Only status you will get a "Move operation failed!" error.

You cannot overwrite a file set to Read Only status.

Move is grayed out if the source and destination paths are identical.

Copy

Copies the selected files from the source path to the destination.

If a file with an identical name to one you are moving exists in the destination directory, a "NAME CONFLICT DURING MOVE" dialog appears. You can **Cancel** to skip moving the file, click on **OK** to overwrite the file with the identical name, or edit the filename on the "New Filename?" line to avoid the conflict and then click on **OK**.

You cannot overwrite a file set to Read Only status.

If the source and destination paths are identical, when MultiFile attempts to copy each file it will see the original and give you the "NAME CONFLICT DURING COPY" dialog. Your only options here are to rename the file or cancel the operation. Overwriting is not allowed because it's not a good idea to copy a file to itself.

Erase

Erases all the selected files. If you have the Erase warning turned on, you will be prompted whether or not to erase each file. If the warning is off, you will still get one message, warning you "Wild Card Delete!!! Are you sure?" This gives you a chance to abort.

Attempting to erase a file set to Read Only status will not work.

Name

Allows you to rename all the selected files, one at a time. A "RENAME FILE" box appears, where you can type in a new filename. Click on **OK** to save the new name (if any) or **Cancel** to skip the current file.

If you attempt to use this option to rename a file set to Read Only status, the operation will be skipped.

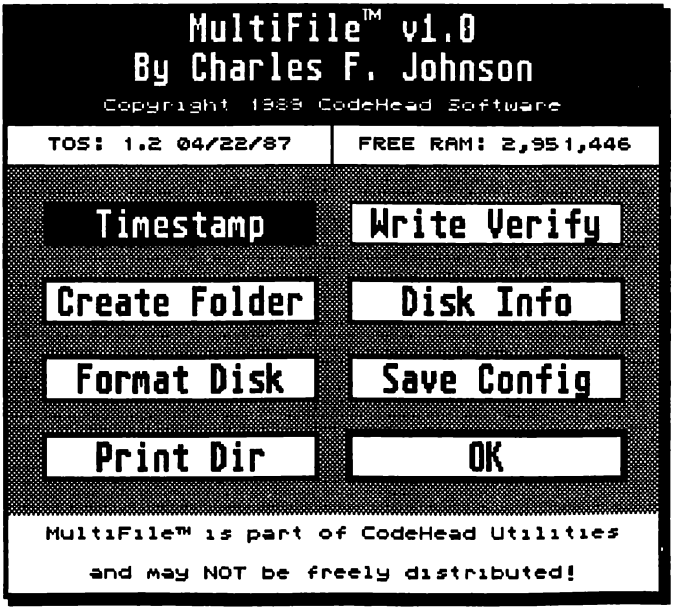
To abort this operation hold down the Alternate key while clicking on one of the buttons. If while holding Alternate you click on **OK** the current filename change is stored and the process is aborted. If you hold Alternate while clicking on **Cancel** the new filename is ignored and the task aborts.

Touch

This "touches" all the selected files. When a file is "touched," its creation/modification date is changed to the current time/date. A file set to Read Only status cannot be touched.

• 'More' Options

Between the File Manipulation and Exit buttons is a button labeled 'More'. Selecting More brings up a small menu containing useful information and a number of functions and controls.



At the top of the menu is a message which provides information about MultiFile, including the author's name and version number of the program.

Below the INFO message are two small boxes, side by side. The left-hand box reports the version number and date of release of the version of TOS your ST has in ROM (which can affect one of the disk formatting options [see below]). The right-hand box reports the amount of free memory currently available in your ST (don't forget, MultiFile is using some of it!).

The buttons in the More menu, row by row, left to right, are as follows:

Timestamp

If this is active (highlighted), when you copy or move a file the timestamp last saved with it is preserved, rather than being changed to the current time and date.

Write Verify

If this button is highlighted, a verify operation will be performed after all writes to make sure the data was written correctly. Disabling this button speeds up file write operations considerably.

Create Folder

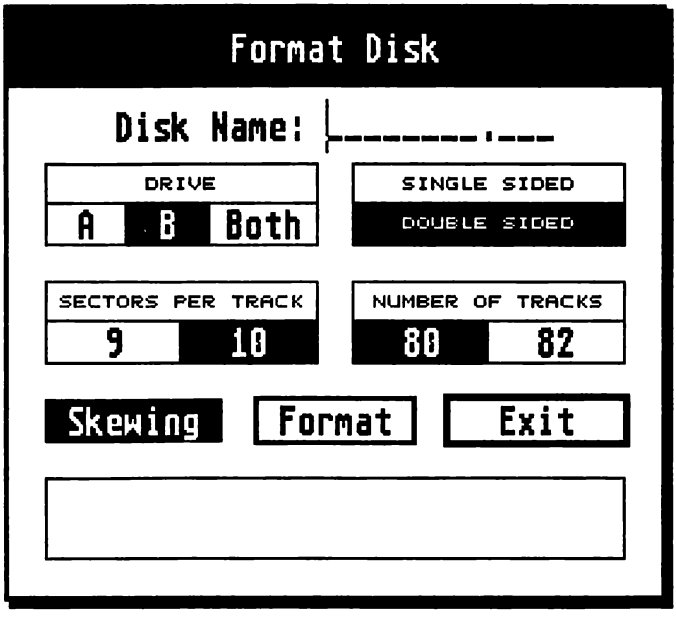
Opens a dialog where you can type in the name of a new folder to be created in the current source directory. Use **OK** to create the new folder and **Cancel** to abort.

Disk Info

Brings up a drive selector box. Pick any valid drive and a dialog appears displaying the drive letter, the "Disk Name" and the amount of free bytes remaining. The Disk Name is usually used on floppy disks, but can also be used on hard drives. Edit the existing one or type in a new one. **OK** exits and accepts the new Disk Name (if any). **Cancel** leaves the box without saving any changes to the disk.

Format Disk

This brings up the dialog seen below. This function allows you to format floppy disks on either or both floppy drives in various formats.



At the top of the box is an input line labeled 'Disk Name:' which allows you to give a name/volume label to the disk you are about to format. If the 'Both' button under DRIVE is selected, two disk name entry fields will appear, one for A and the other for B.

There are a number of options, explained below:

DRIVE

Select A, B, or BOTH. If you select BOTH Multifile will format the disk in drive A first followed immediately by the disk in drive B (if you have only one drive and use BOTH you will be prompted to insert disk B into drive A when the program attempts to format drive B's disk).

SINGLE SIDED/DOUBLE SIDED

Pick whichever format you wish to use and highlight it (if you have a single sided drive you cannot use the double sided format option).

SECTORS PER TRACK

Your options here are 9 or 10 sectors per track. The ST's usual disk formatting routine formats with 80 tracks and 9 sectors per track. Using 10 sectors will increase the disk storage space by approximately 11 percent as compared to the same number of tracks with only 9 sectors per track. The drawback is that the ST's disk copy function will not work on a disk formatted in this fashion, though you can still copy the files to and from the disk as always.

NUMBER OF TRACKS

Atari rates their drives at 80 tracks, although it is possible to format a disk with 82 tracks. You can select the number of tracks with this option. We recommend the 80 track format. 82 tracks increases the total storage capacity of the disk by approximately 2.5 percent as compared to the same number of sectors per track on an 80 track disk. The size difference is not enormous, and there is a possibility that some drives may not be able to read disks formatted with 82 tracks.

Skewing

If your ST has TOS 1.0 or uses a RAM TOS this button will be grayed out, because those versions of the operating system do not support sector skewing. Highlighting 'Skewing' will format a disk with a sector-skewing technique that has no ill effects on the disk but makes it faster to read from and write to. If you have TOS 1.2 or higher, we highly recommend turning Skewing on.

Format

Clicking on the Format button will begin the format operation. If 'Format' is checked in the WARNings menu, you will be given a warning and a chance to abort *before* the formatting begins. If not, the format will begin immediately after you click on this button. The disk will be formatted according to the selections you made above, including the drive, disk name, format, number of sectors, tracks, and whether or not to skew the sectors.

Exit

Click on Exit to leave the Format Disk dialog.

At the bottom of the Format dialog is a "thermometer" that fills up as a disk is formatted, to give you an indication of the progress of a formatting operation.

Save Config

This saves all the current MultiFile settings to the MULTFILE.PRG or MULTFILE.ACC file. These settings include the current source and destination paths, all the paths in the 'Choose Path' box, the SORT and WARN settings, and the Timestamp, Write Verify and Format Disk settings. Once this configuration has been saved, every time you load and use MultiFile your preferred settings will come up as the defaults.

Print Dir

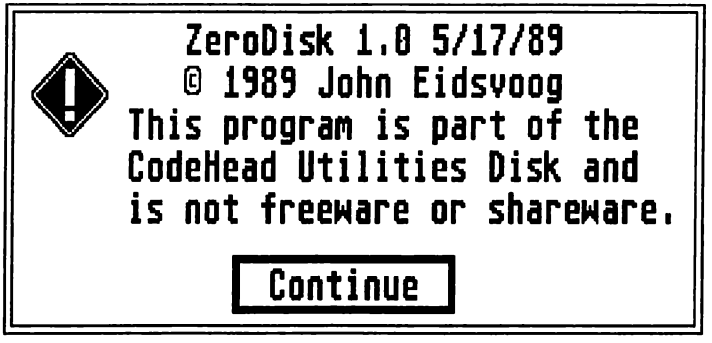
Clicking on this button will allow you to print out a listing of the contents of the current source directory. If "Print" is selected under the WARNings options you will be given a choice of printing or aborting; if not, MultiFile will immediately begin attempting the print the listing.

OK

Exits the More menu and returns to the main MultiFile box.

ZeroDisk

Author: John Eidsvoog
Filename: ZERODISK.PRG
Use: Very quickly erases all files on a floppy disk
Type: Stand-alone program
All resolutions



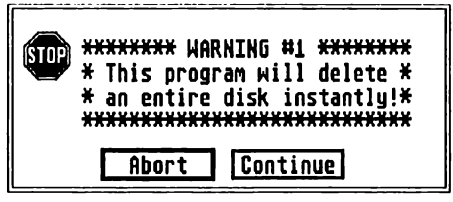
In order to erase all the files on a floppy disk, you need to either drag them all to the Trash can or reformat the disk, both of which take more time than most of us prefer. ZeroDisk is designed specifically to speed up this particular task. The key thing to remember is that ZeroDisk will, in a matter of about three seconds, wipe out *every* file on a floppy disk. It is designed for bulk disk erasures, *not* for erasing a group of specified files. With ZeroDisk it's all or nothing.

ZeroDisk does *not* reformat the disk, instead, it wipes out the disk's directory information, effectively "erasing" the files. If you feel a disk needs to be reformatted, you shouldn't be using ZeroDisk.

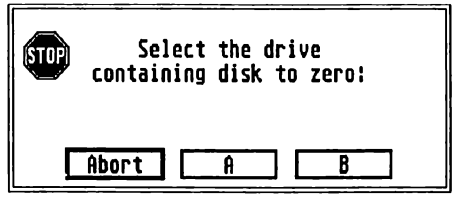
CAUTION! Exercise *extreme* care with this program. The potential for a disastrous mistake is quite real, so read the instructions carefully. If you are careless you could accidentally destroy one or more disks of important files! Once you zero a disk there is almost *no chance* of recovering the data that was on it!

• Running it

Just run ZERODISK.PRG as you would any program. When started, ZeroDisk will display a title box. Click on **Continue** to begin. An alert box like the one below will appear:



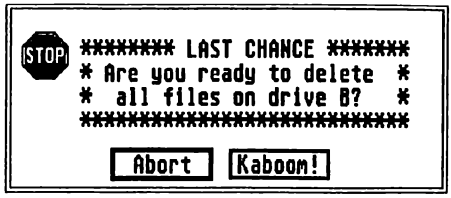
If you do not want to erase any disks, you can select the **Abort** button, which will exit the program. This button appears at every stage of the program, allowing you to bail out at almost any time.



Clicking on **Continue** in this box will cause a new box to appear. In this box you must specify which floppy drive contains the disk you wish to zero/erase. If none, select **Abort**. You can select drive A or B only, as ZeroDisk will not work on hard disks or other drives.

Before continuing: If you have only one floppy drive, you should insert the disk you intend to zero out. If you have two drives, you should make certain the disk to be zeroed is in the correct drive. It would be unfortunate if the disk you intended to erase was in drive B when you selected drive A. *Be careful!*

After clicking on the button for the drive you wish to zero out, you'll be given one last chance to change your mind as a final alert box gives you the option to either **Abort** the program or to delete all the files on the specified disk by clicking on the **Kaboom!** button.



WARNING! If you click on **Kaboom!** the selected disk will be zeroed out instantly! There are no second chances to abort once this button has been selected. So make *absolutely sure* that the proper disk is in the designated drive *before* selecting **Kaboom!**

Once **Kaboom!** has been selected, the program will go to work on the specified drive and disk. After about three seconds (it takes about this long no matter how the disk is formatted--as long as it is a valid ST format) the program will report its success. If all goes well a final alert box will appear stating how many free bytes are available on the now-blank disk, and give you an option to **Quit** the program or zero another by selecting **More**. If you select **More** you will be returned to the Select Drive Box and can continue as before.

• Additional information

If your system has only one floppy drive, it may happen that you will be prompted with a message telling you to insert the specified disk in drive A (depending on which one you selected). Whether or not this prompt appears depends on which "logical" disk you last accessed. For example, if you ran ZeroDisk from a window for the drive A icon, but selected drive B as the target drive, you would be prompted to insert the disk. if you selected A, the prompt would not appear, because A was the last drive accessed.

If no disk is in the specified drive when you select **Kaboom!** the drive will spin for a few seconds and you will receive a GEM error message stating that the drive is not responding. If this happens, you may select **Cancel** to return to Select Drive box, or just insert the disk to

erase into the specified drive and click on the **Retry** button in the box. Selecting **Retry** will cause ZeroDisk to try erasing the specified disk again.

If the disk in the selected drive is write-protected, an alert will appear telling you this and allow you to **Cancel** or **Retry**. If you wish to try again, remove the disk from the drive, remove the write protection, then insert it back into the drive and click on the **Retry** button. The program will then make another attempt to erase the disk.

If there is some problem with the disk, you may see an alert box warning you that the data on the disk is damaged. Again, you are presented with **Cancel** and **Retry** options. If the disk fails to erase properly after two tries it is quite likely that there is something wrong with it. Surprisingly, some bad disks can be formatted from the Desktop as if they were good. If you get a disk that can be reformatted from the Desktop but which ZeroDisk fails to erase, you might wish to try formatting it with a dedicated disk formatting utility, which might isolate bad sectors or other flaws. In any case, any disk that repeatedly produces such "damaged data" errors should be thrown away, as you are likely to lose any data you save on it.

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- **ZeroDisk** - Very quickly erases all files on a floppy disk.
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